CDX-M60UI/MR60UI

SERVICE MANUAL

Ver. 1.1 2009.02

US Model
Canadian Model
CDX-M60UI
AEP Model
UK Model
CDX-MR60UI
E Model
CDX-M60UI

Photo: CDX-MR60UI

- The tuner and CD sections have no adjustments.

Model Name Using Similar Mechanism	CDX-GT630UI
CD Drive Mechanism Type	MG-101Z-188//Q
Optical Pick-up Name	DAX-25A

AUDIO POWER SPECIFICATIONS (CDX-M60UI)
CEA2006 Standard
Power Output: 17 Watts RMS × 4 at
4 Ohms <1 % THD + N
SN Ratio: 82 dBA
(reference: 1 Watt into 4 Ohms)

SPECIFICATIONS

CD Player section
Signal-to-noise ratio: 120 dB
Frequency response: 10 – 20,000 Hz
Wow and flutter: Below measurable limit

Tuner section
FM
Tuning range:
CDX-M60UI:
87.5 – 108.0 MHz (at 50 kHz step)
87.5 – 107.9 MHz (at 200 kHz step)
CDX-MR60UI: 87.5 – 108.0 MHz
FM tuning interval:
CDX-M60UI: 50 kHz/200 kHz switchable
Antenna (aerial) terminal:
External antenna (aerial) connector
Intermediate frequency: 150 kHz
Usable sensitivity: 10 dBf
Selectivity: 75 dB at 400 kHz
Signal-to-noise ratio: 70 dB (mono)
Separation: 40 dB at 1 kHz
Frequency response: 20 – 15,000 Hz

AM (CDX-M60UI)
Tuning range:
531 – 1,602 kHz (at 9 kHz step)
530 – 1,710 kHz (at 10 kHz step)
AM tuning interval:
9 kHz/10 kHz switchable
Antenna (aerial) terminal:
External antenna (aerial) connector
Intermediate frequency: 25 kHz
Sensitivity: 26 µV

MW/LW (CDX-MR60UI)
Tuning range:
MW: 531 – 1,602 kHz
LW: 153 – 279 kHz
Antenna (aerial) terminal:
External antenna (aerial) connector
Intermediate frequency: 25 kHz
Sensitivity:
MW: 26 µV, LW: 45 µV

USB Player section
Interface: USB (Full-speed)
Maximum current: 500mA

Power amplifier section
Outputs: Speaker outputs (sure seal connectors)
Speaker impedance: 4 – 8 ohms
Maximum power output: 52 W × 4 (at 4 ohms)

– Continued on next page –

CDX-M60UI
FM/AM COMPACT DISC PLAYER
CDX-MR60UI
FM/MW/LW COMPACT DISC PLAYER

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Sony Corporation
Audio&Video Business Group
Published by Sony Techno Create Corporation

SONY®

General

Output:
- Audio outputs terminal (front/rear)
- Subwoofer output terminal (mono)
- Power antenna (aerial) relay control terminal
- Power amplifier control terminal

Inputs:
- Remote controller input terminal
- Antenna (aerial) input terminal
- Telephone ATT control terminal
- Illumination control terminal
- BUS control input terminal
- BUS audio input terminal
- AUX input jack (stereo mini jack)
- BUS signal input terminal

Tone controls:
- Low: ±10 dB at 60 Hz (XPLOD)
- Mid: ±10 dB at 1 kHz (XPLOD)
- High: ±10 dB at 10 kHz (XPLOD)

Power requirements: 12 V DC boat battery (negative ground (earth))

Dimensions: Approx. 178 × 50 × 182 mm ($7\ 1/8 \times 2 \times 7\ 1/4$ in.) (w/h/d)

Mounting dimensions: Approx. 182 × 53 × 162 mm ($7\ 1/4 \times 2\ 1/8 \times 6\ 1/2$ in.) (w/h/d)

Mass: Approx. 1.3 kg (2 lb. 14 oz.)

Supplied accessories:
- Card remote commander: RM-X151
- Parts for installation and connections (1 set)

Design and specifications are subject to change without notice.

SAFETY-RELATED COMPONET WARNING!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pickup block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

NOTES ON CHIP COMPONENT REPLACEMENT

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

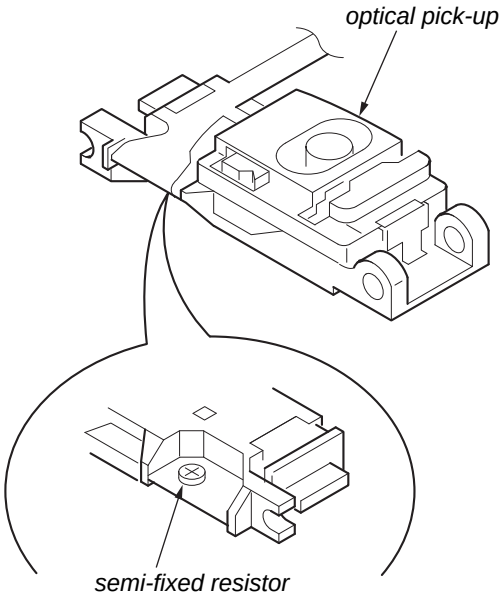
TEST DISCS

Please use the following test discs for the check on the CD section.

YDES-18 (Part No. 3-702-101-01)
PATD-012 (Part No. 4-225-203-01)

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

If the optical pick-up block is defective, please replace the whole optical pick-up block.
Never turn the semi-fixed resistor located at the side of optical pick-up block.



This compact disc player is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT label is located on the exterior.

CLASS 1
LASER PRODUCT

This label is located on the bottom of the chassis.

- **CD Play back**
  You can play CD-DA (also containing CD TEXT) and CD-R/CD-RW (MP3/WMA/AAC files).

Type of disc	Label on the disc
CD-DA	COMPACT disc DIGITAL AUDIO Recordable COMPACT disc DIGITAL AUDIO ReWritable
MP3 WMA AAC	COMPACT disc DIGITAL AUDIO Recordable COMPACT disc DIGITAL AUDIO ReWritable COMPACT disc Recordable COMPACT disc ReWritable

UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(**Caution:** Some printed circuit boards may not come printed with the lead free mark due to their particular size)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350 °C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

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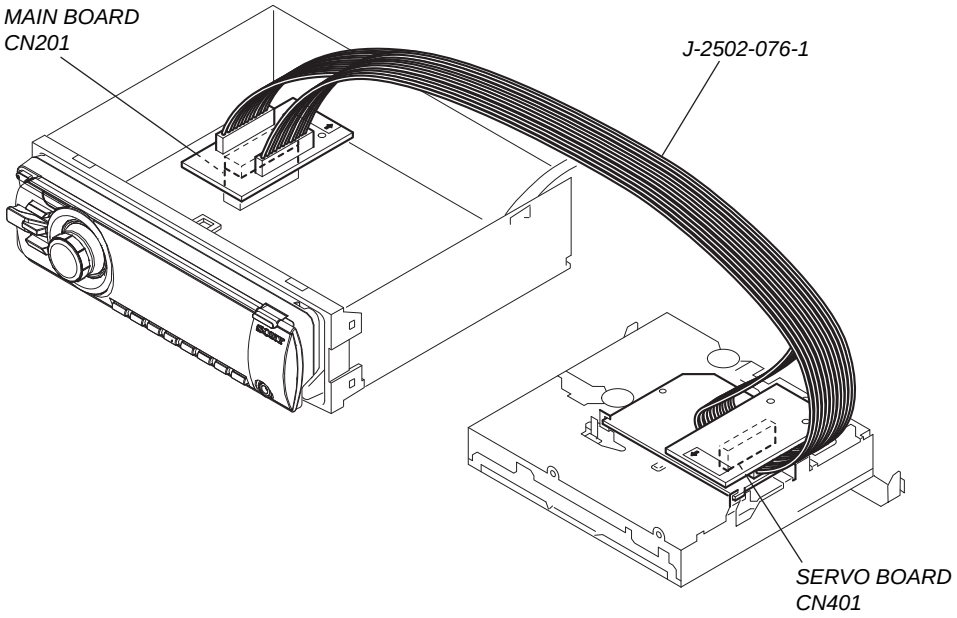
SECTION 1
SERVICE NOTES

EXTENSION CABLE AND SERVICE POSITION

When repairing or servicing this set, connect the jig (extension cable) as shown below.

- Connect the MAIN board (CN201) and the SERVO board (CN401) with the extension cable (Part No. J-2502-076-1).



NOTE FOR REPLACEMENT OF THE SERVO BOARD

When repairing, the complete SERVO board (Part No. A-1554-409-A) should be replaced since any parts in the SERVO board cannot be repaired.

NOTE FOR THE 20-PIN CONNECTOR (CN901)

Do not use alcohol to clean the 20-pin connector (CN901) connecting the front panel with the main body.
Do not touch the connector directly with your bare hand. Poor contact may be caused.

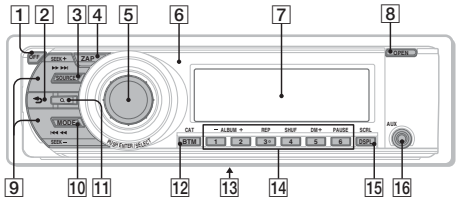
SECTION 2
GENERAL

This section is extracted from instruction manual.

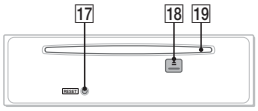
- **LOCATION OF CONTROLS**
- **CDX-M60UI**

Location of controls and basic operations

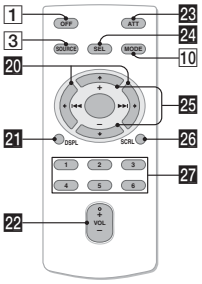
Main unit



Front panel removed



Card remote commander RM-X151



This section contains instructions on the location of controls and basic operations. For details, see the respective pages.
The corresponding buttons on the card remote commander control the same functions as those on the unit.

1 **OFF button**
To power off; stop the source.

2 **↩ (BACK) button** page 10
To return to the previous display.

3 **SOURCE button**
To power on; change the source (Radio/CD/USB/AUX)*1.

4 **ZAP button** page 11
To enter ZAPPIN™ mode.

5 **Control dial/select button**
To adjust volume (rotate); select setup items (press and rotate).

6 **Receptor for the card remote commander**

7 **Display window**

8 **OPEN button** page 7

9 **SEEK +/– buttons**
CD/USB:
To skip tracks (press); skip tracks continuously (press, then press again within about 1 second and hold); reverse/fast-forward a track (press and hold).
Radio:
To tune in stations automatically (press); find a station manually (press and hold).

10 **MODE button** page 11, 14, 15
Press to: Select the radio band (FM/AM)*1/ select the play mode of iPod.
Press and hold to: Enter/cancel the passenger control.

11 **Q (BROWSE) button** page 10
To enter the Quick-BrowZer mode.

12 **BTM/CAT*2 button** page 11
To start the BTM function (press and hold).

13 **Frequency select switch** (located on the bottom of the unit)
See "Frequency select switch" in the supplied installation/connections manual.

14 **Number buttons**
CD/USB:
①/②: **ALBUM –/+** (during MP3/WMA/AAC playback)
To skip albums (press); skip albums continuously (press and hold).
③: **REP** page 12, 13, 15
④: **SHUF** page 12, 13, 15
⑤: **DM+**
Improves digitally compressed sound, such as MP3.
To activate the DM+ function, set "ON." To cancel, set "OFF."
⑥: **PAUSE**
To pause playback. To cancel, press again.
Radio:
To receive stored stations (press); store stations (press and hold).

15 **DSPL (display)/SCRL (scroll) button** page 12, 13, 15
To change display items (press); scroll the display item (press and hold).

16 **AUX input jack** page 18
To connect a portable audio device.

17 **RESET button** page 6

18 **⏏ (eject) button**
To eject the disc.

19 **Disc slot**
To insert the disc.

The following buttons on the card remote commander have also different buttons/functions from the unit. Remove the insulation film before use (page 6).

20 **← (I◄◄)/→ (►►I) buttons**
To control CD/radio/USB, the same as (SEEK) –/+ on the unit.
Setup, sound setting, etc., can be operated by ← →.

21 **DSPL (display) button** page 12, 13, 15
To change display items.

22 **VOL (volume) +/– button**
To adjust volume.

23 **ATT (attenuate) button**
To attenuate the sound. To cancel, press again.

24 **SEL (select) button**
The same as the select button on the unit.

25 **↑ (+)/↓ (–) buttons**
To control CD/USB, the same as ①/② (ALBUM –/+) on the unit.
Setup, sound setting, etc., can be operated by ↑ ↓.

26 **SCRL (scroll) button**
To scroll the display item.

27 **Number buttons**
To receive stored stations (press); store stations (press and hold).

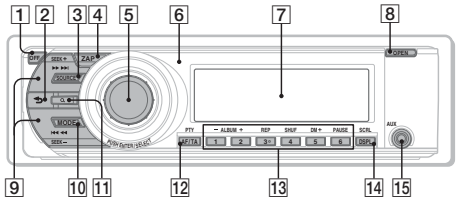
*1 *In the case of a CD changer, HD Radio tuner or SAT tuner being connected; when (SOURCE) is pressed, the connected device ("HD," "XM" or "SR") will appear in the display, depending on which device is connected. Furthermore, if (MODE) is pressed, you can switch the changer, HD Radio tuner band or SAT tuner band.*
*2 *When the SAT tuner is connected.*

Note
If the unit is turned off and the display disappears, it cannot be operated with the card remote commander unless (SOURCE) on the unit is pressed, or a disc is inserted to activate the unit first.

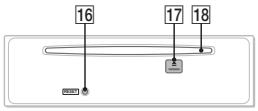
- **CDX-MR60UI**

Location of controls and basic operations

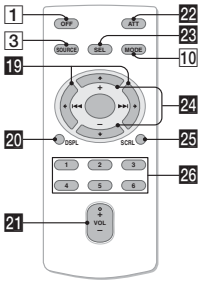
Main unit



Front panel removed



Card remote commander RM-X151



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To power on; change the source (Radio/CD/USB/AUX)*.

4 **ZAP button** page 11
To enter ZAPPIN™ mode.

5 **Control dial/select button**
To adjust volume (rotate); select setup items (press and rotate).

6 **Receptor for the card remote commander**

7 **Display window**

8 **OPEN button** page 7

9 **SEEK +/– buttons**
CD/USB:
To skip tracks (press); skip tracks continuously (press, then press again within about 1 second and hold); reverse/fast-forward a track (press and hold).
Radio:
To tune in stations automatically (press); find a station manually (press and hold).

10 **MODE button** page 11, 16, 17
Press to: Select the radio band (FM/MW/LW)*/select the play mode of iPod.
Press and hold to: Enter/cancel the passenger control.

11 **Q (BROWSE) button** page 10
To enter the Quick-BrowZer mode.

12 **AF (Alternative Frequencies)/ TA (Traffic Announcement)/ PTY (Program Type) button** page 12, 13
To set AF and TA (press); select PTY (press and hold) in RDS.

13 **Number buttons**
CD/USB:
①/②: **ALBUM –/+** (during MP3/WMA/AAC playback)
To skip albums (press); skip albums continuously (press and hold).
③: **REP** page 13, 15, 16
④: **SHUF** page 13, 15, 16
⑤: **DM+**
Improves digitally compressed sound, such as MP3.
To activate the DM+ function, set "ON." To cancel, set "OFF."
⑥: **PAUSE**
To pause playback. To cancel, press again.
Radio:
To receive stored stations (press); store stations (press and hold).

14 **DSPL (display)/SCRL (scroll) button** page 12, 13, 14, 16, 17
To change display items (press); scroll the display item (press and hold).

15 **AUX input jack** page 19
To connect a portable audio device.

16 **RESET button** page 6

17 **⏏ (eject) button**
To eject the disc.

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To insert the disc.

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To control CD/radio/USB, the same as (SEEK) –/+ on the unit.
Setup, sound setting, etc., can be operated by ← →.

20 **DSPL (display) button** page 12, 13, 14, 16, 17
To change display items.

21 **VOL (volume) +/– button**
To adjust volume.

22 **ATT (attenuate) button**
To attenuate the sound. To cancel, press again.

23 **SEL (select) button**
The same as the select button on the unit.

24 **↑ (+)/↓ (–) buttons**
To control CD/USB, the same as ①/② (ALBUM –/+) on the unit.
Setup, sound setting, etc., can be operated by ↑ ↓.

25 **SCRL (scroll) button**
To scroll the display item.

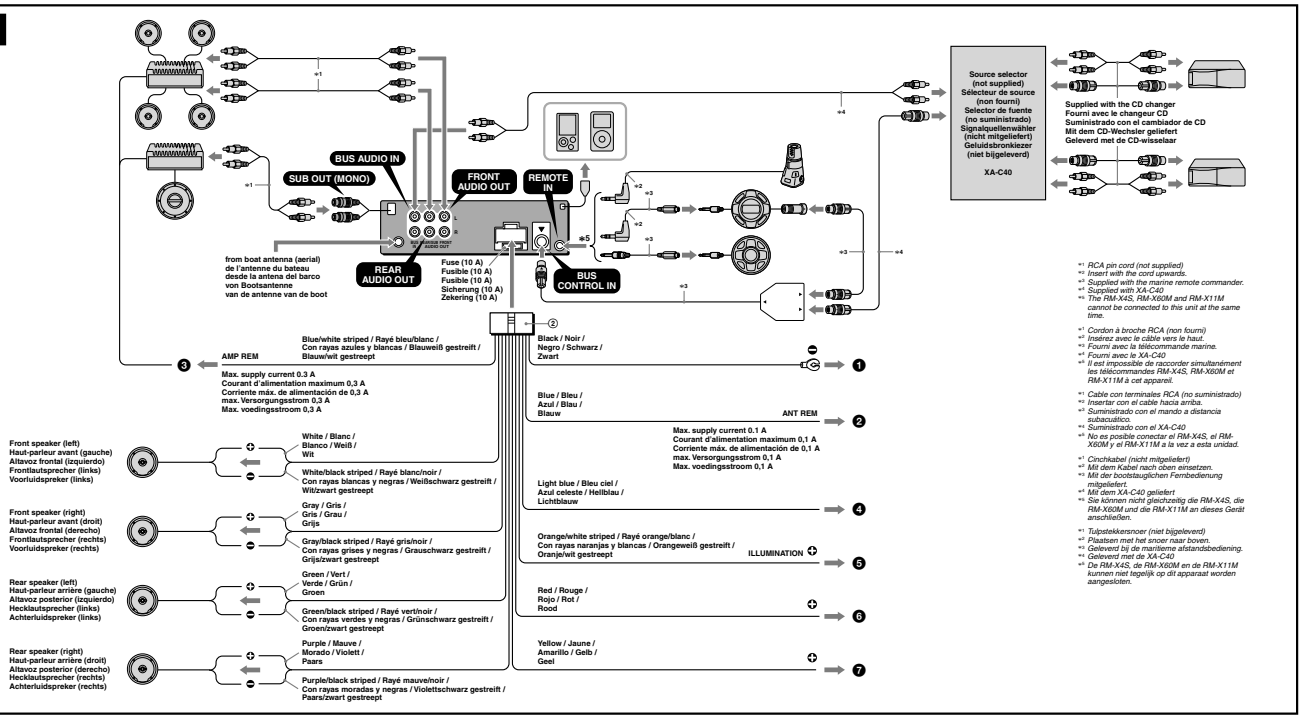
26 **Number buttons**
To receive stored stations (press); store stations (press and hold).

* *In the case of a CD changer being connected; when (SOURCE) is pressed, "CD" and the unit number will appear in the display. Furthermore, if (MODE) is pressed, you can switch the changer.*

Note
If the unit is turned off and the display disappears, it cannot be operated with the card remote commander unless (SOURCE) on the unit is pressed, or a disc is inserted to activate the unit first.

- **CONNECTIONS**
- **CDX-M60UI**

3


BUS AUDIO IN
SUB OUT (MONO)
FRONT AUDIO OUT
REMOTE IN
REAR AUDIO OUT
BUS CONTROL IN
Fuse (10 A)
Fusible (10 A)
Fusible (10 A)
Sicherung (10 A)
Zekering (10 A)
from boat antenna (aerial)
de l'antenne du bateau
desde la antena del barco
von Bootsantenne
van de antenne van de boot
Source selector
(not supplied)
Sélecteur de source
(non fourni)
Selector de fuente
(no suministrado)
Signalquellenwähler
(nicht mitgeliefert)
Geluidsbronkiezer
(niet bijgeleverd)
XA-C40
Supplied with the CD changer
Fourni avec le changeur CD
Suministrado con el cambiador de CD
Mit dem CD-Wechsler geliefert
Geleverd met de CD-wisselaar
AMP REM
Blue/white striped / Rayé bleu/blanc / Con rayas azules y blancas / Blauweiß gestreift / Blauw/wit gestreept
Max. supply current 0.3 A
Courant d'alimentation maximum 0,3 A
Corriente máx. de alimentación de 0,3 A
max. Versorgungsstrom 0,3 A
Max. voedingsstroom 0,3 A
Black / Noir / Negro / Schwarz / Zwart
Blue / Bleu / Azul / Blau / Blauw
ANT REM
Max. supply current 0.1 A
Courant d'alimentation maximum 0,1 A
Corriente máx. de alimentación de 0,1 A
max. Versorgungsstrom 0,1 A
Max. voedingsstroom 0,1 A
Light blue / Bleu ciel / Azul celeste / Hellblau / Lichtblauw
Orange/white striped / Rayé orange/blanc / Con rayas naranjas y blancas / Orangeweiß gestreift / Oranje/wit gestreept
ILLUMINATION
Red / Rouge / Rojo / Rot / Rood
Yellow / Jaune / Amarillo / Gelb / Geel
Front speaker (left)
Haut-parleur avant (gauche)
Altavoz frontal (izquierdo)
Frontlautsprecher (links)
Voorluidspreker (links)
White / Blanc / Blanco / Weiß / Wit
White/black striped / Rayé blanc/noir / Con rayas blancas y negras / Weißschwarz gestreift / Wit/zwart gestreept
Front speaker (right)
Haut-parleur avant (droit)
Altavoz frontal (derecho)
Frontlautsprecher (rechts)
Voorluidspreker (rechts)
Gray / Gris / Gris / Grau / Grijs
Gray/black striped / Rayé gris/noir / Con rayas grises y negras / Grauschwarz gestreift / Grijs/zwart gestreept
Rear speaker (left)
Haut-parleur arrière (gauche)
Altavoz posterior (izquierdo)
Hecklautsprecher (links)
Achterluidspreker (links)
Green / Vert / Verde / Grün / Groen
Green/black striped / Rayé vert/noir / Con rayas verdes y negras / Grünschwarz gestreift / Groen/zwart gestreept
Rear speaker (right)
Haut-parleur arrière (droit)
Altavoz posterior (derecho)
Hecklautsprecher (rechts)
Achterluidspreker (rechts)
Purple / Mauve / Morado / Violett / Paars
Purple/black striped / Rayé mauve/noir / Con rayas moradas y negras / Violettschwarz gestreift / Paars/zwart gestreept

*1 RCA pin cord (not supplied)
*2 Insert with the cord upwards.
*3 Supplied with the marine remote commander.
*4 Supplied with XA-C40
*5 The RM-X4S, RM-X60M and RM-X11M cannot be connected to this unit at the same time.

*1 Cordon à broche RCA (non fourni)
*2 Insérez avec le câble vers le haut.
*3 Fourni avec la télécommande marine.
*4 Fourni avec le XA-C40
*5 Il est impossible de raccorder simultanément les télécommandes RM-X4S, RM-X60M et RM-X11M à cet appareil.

*1 Cable con terminales RCA (no suministrado)
*2 Insertar con el cable hacia arriba.
*3 Suministrado con el mando a distancia subacuático.
*4 Suministrado con el XA-C40
*5 No es posible conectar el RM-X4S, el RM-X60M y el RM-X11M a la vez a esta unidad.

*1 Cinchkabel (nicht mitgeliefert)
*2 Mit dem Kabel nach oben einsetzen.
*3 Mit der bootstauglichen Fernbedienung mitgeliefert.
*4 Mit dem XA-C40 geliefert
*5 Sie können nicht gleichzeitig die RM-X4S, die RM-X60M und die RM-X11M an dieses Gerät anschließen.

*1 Tulpstekkersnoer (niet bijgeleverd)
*2 Plaatsen met het snoer naar boven.
*3 Geleverd bij de marineme afstandsbediening.
*4 Geleverd met de XA-C40
*5 De RM-X4S, de RM-X60M en de RM-X11M kunnen niet tegelijk op dit apparaat worden aangesloten.

Connection diagram 3

❶ To battery or distribution block ground
First connect the black ground (earth) lead, then connect the yellow and red power supply leads.

❷ To the power antenna (aerial) control lead or power supply lead of antenna (aerial) booster
Notes
- *It is not necessary to connect this lead if there is no power antenna (aerial) or antenna (aerial) booster, or with a manually-operated telescopic antenna (aerial).*
- *When your boat has a built-in FM/AM antenna (aerial) in the rear/side glass, see "Notes on the control and power supply leads."*

❸ To AMP REMOTE IN of an optional power amplifier
This connection is only for amplifiers. Connecting any other system may damage the unit.

❹ To the interface cable of a telephone

❺ To the illumination signal
Be sure to connect the black ground (earth) lead to the battery or distribution block ground first.

❻ To the +12 V power terminal which is energized in the accessory position of the ignition switch
Note
If there is no accessory position, connect to the +12 V power (battery) terminal which is energized at all times.
Be sure to connect the black ground (earth) lead to the battery or distribution block ground first.

❼ To the +12 V power terminal which is energized at all times
Be sure to connect the black ground (earth) lead to the battery or distribution block ground first.

Notes on the control and power supply leads
- *The power antenna (aerial) control lead (blue) supplies +12 V DC when you turn on the tuner.*
- *A power antenna (aerial) without a relay box cannot be used with this unit.*

Memory hold connection
When the yellow power supply lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the boat chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the ground (earth) lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker leads installed in your boat if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker leads to each other.*

Note on connection
If speaker and amplifier are not connected correctly, "FAILURE" appears in the display. In this case, make sure the speaker and amplifier are connected correctly.

Schémas de raccordement 3

❶ Vers la batterie ou le répartiteur de terre
Branchez d'abord le câble de mise à la masse noir et, ensuite, les câbles d'alimentation jaune et rouge.

❷ Vers le câble de commande d'antenne électrique ou le câble d'alimentation de l'amplificateur d'antenne
Remarques
- *Il n'est pas nécessaire de raccorder ce câble s'il n'y a pas d'antenne électrique ni d'amplificateur d'antenne, ou avec une antenne télescopique manuelle.*
- *Si votre bateau est équipé d'une antenne FM/AM intégrée dans la vitre arrière/latérale, reportez-vous à la section « Remarques sur les câbles de commande et d'alimentation ».*

❸ Vers AMP REMOTE IN de l'amplificateur de puissance en option
Ce raccordement s'applique uniquement aux amplificateurs. Le raccordement de tout autre système risque d'endommager l'appareil.

❹ Vers le câble d'interface d'un téléphone

❺ Vers le signal d'éclairage
Commencez par raccorder le câble de mise à la masse noir à la batterie ou au répartiteur de terre.

❻ Vers la borne +12 V qui est alimentée quand la clé de contact est sur la position accessoires
Remarque
S'il n'y a pas de position accessoires, raccordez la borne d'alimentation (batterie) +12 V qui est alimentée en permanence. Commencez par raccorder le câble de mise à la masse noir à la batterie ou au répartiteur de terre.

❼ Vers la borne +12 V qui est alimentée en permanence
Commencez par raccorder le câble de mise à la masse noir à la batterie ou au répartiteur de terre.

Remarques sur les câbles de commande et d'alimentation
- *Le câble de commande d'antenne électrique (bleu) fournit une alimentation de +12 V CC lorsque vous mettez la radio sous tension.*
- *Une antenne électrique sans boîtier de relais ne peut pas être utilisée avec cet appareil.*

Raccordement pour la conservation de la mémoire
Lorsque le câble de commande d'antenne jaune est connecté, le circuit de la mémoire est alimenté en permanence même si la clé de contact est en position d'arrêt.

Remarques sur le raccordement des haut-parleurs
- *Avant de raccorder les haut-parleurs, mettez l'appareil hors tension.*
- *Utilisez des haut-parleurs ayant une impédance de 4 à 8 ohms et une capacité adéquate sous peine de les endommager.*
- *Ne raccordez pas les bornes des haut-parleurs au châssis du bateau, et ne raccordez pas les bornes du haut-parleur droit à celles du haut-parleur gauche.*
- *Ne raccordez pas le câble de mise à la masse de cet appareil à la borne négative (–) du haut-parleur.*
- *Ne tentez pas de raccorder les haut-parleurs en parallèle.*
- *Raccordez uniquement des haut-parleurs passifs. Le raccordement de haut-parleurs actifs (avec des amplificateurs intégrés) aux bornes des haut-parleurs pourrait endommager l'appareil.*
- *Pour éviter tout problème de fonctionnement, n'utilisez pas les câbles des haut-parleurs intégrés installés dans votre bateau si l'appareil dispose d'un câble négatif commun (–) pour les haut-parleurs droit et gauche.*
- *Ne raccordez pas entre eux les cordons des haut-parleurs de l'appareil.*

Remarque sur le raccordement
Si les haut-parleurs et l'amplificateur ne sont pas raccordés correctement, le message « FAILURE » s'affiche. Dans ce cas, assurez-vous que les haut-parleurs et l'amplificateur sont raccordés correctement.

Diagrama de conexión 3

❶ A la conexión a masa de la batería o del bloque de distribución
Conecte primero el cable de conexión a masa negro, y después los cables amarillo y rojo de fuente de alimentación.

❷ Al cable de control de la antena motorizada o al cable de fuente de alimentación del amplificador de señal de la antena
Notas
- *Si no se dispone de antena motorizada ni de amplificador de antena, o se utiliza una antena telescópica accionada manualmente, no será necesario conectar este cable.*
- *Si el barco incorpora una antena FM/AM en el cristal posterior o lateral, consulte "Notas sobre los cables de control y de fuente de alimentación".*

❸ A AMP REMOTE IN de un amplificador de potencia opcional
Esta conexión es sólo para amplificadores. La conexión de cualquier otro sistema puede dañar la unidad.

❹ Al cable de interfaz de un teléfono

❺ A una señal de iluminación
Conecte primero el cable de conexión a masa negro a la toma de masa de la batería o del bloque de distribución.

❻ Al terminal de alimentación de +12 V que recibe energía en la posición de accesorio del interruptor de encendido
Nota
Si no hay posición de accesorio, conéctelo al terminal de alimentación (batería) de +12 V que recibe energía sin interrupción.
Conecte primero el cable de conexión a masa negro a la toma de masa de la batería o del bloque de distribución.

❼ Al terminal de alimentación de +12 V que recibe energía sin interrupción
Conecte primero el cable de conexión a masa negro a la toma de masa de la batería o del bloque de distribución.

Notas sobre los cables de control y de fuente de alimentación
- *El cable de control de la antena motorizada (azul) suministrará cc de +12 V cuando conecte la alimentación del sintonizador.*
- *Con esta unidad no es posible utilizar una antena motorizada sin caja de relé.*

Conexión para protección de la memoria
Si conecta el cable de fuente de alimentación amarillo, el circuito de la memoria recibirá siempre alimentación, aunque apague el interruptor de encendido.

Notas sobre la conexión de los altavoces
- *Antes de conectar los altavoces, desconecte la alimentación de la unidad.*
- *Utilice altavoces con una impedancia de 4 a 8 Ω con la capacidad de potencia adecuada para evitar que se dañen.*
- *No conecte los terminales de altavoz al chasis del barco, ni conecte los terminales del altavoz derecho con los del izquierdo.*
- *No conecte el cable de conexión a masa de esta unidad al terminal negativo (–) del altavoz.*
- *No intente conectar los altavoces en paralelo.*
- *Conecte solamente altavoces pasivos. Si conecta altavoces activos (con amplificadores incorporados) a los terminales de altavoz, puede dañar la unidad.*
- *Para evitar fallos de funcionamiento, no utilice los cables de altavoz incorporados instalados en el barco si su unidad comparte un cable negativo común (–) para los altavoces derecho e izquierdo.*
- *No conecte los cables de altavoz de la unidad entre sí.*

Nota sobre la conexión
Si el altavoz no está conectado correctamente, aparecerá "FAILURE" en la pantalla. Si es así, compruebe la conexión del altavoz.

Anschlussdiagramm 3

❶ An Batterie oder Verteilerblockmasse
Schließen Sie zuerst die schwarze Massleitung und dann die gelbe und rote Stromversorgungsleitung an.

❷ An Motorantennen-Steuerleitung oder Stromversorgungskabel für Antennenverstärker
Hinweise
- *Diese Leitung brauchen Sie nicht anzuschließen, wenn keine Motorantenne bzw. kein Antennenverstärker vorhanden ist oder wenn Sie eine manuell ausziehbare Teleskopantenne verwenden.*
- *Wenn das Boot mit einer in der Heck-/Seitenfensterscheibe integrierten UKW/AM-Antenne ausgestattet ist, lesen Sie unter „Hinweise zu den Steuer- und Stromversorgungsleitungen" nach.*

❸ An AMP REMOTE IN des gesondert erhältlichen Endverstärkers
Dieser Anschluss ist ausschließlich für Verstärker gedacht. Schließen Sie nichts anderes daran an. Andernfalls kann das Gerät beschädigt werden.

❹ An das Schnittstellenkabel eines Telefons

❺ An die Signalleitung für Beleuchtung
Achten Sie darauf, die schwarze Massleitung zuerst an die Batterie oder die Verteilerblockmasse anzuschließen.

❻ An den +12-V-Stromversorgungsanschluss, an dem Spannung anliegt, wenn sich das Zündschloss in der Zubehörposition befindet
Hinweis
Wenn das Zündschloss keine Zubehörposition (ACC oder I) aufweist, schließen Sie die Leitung an den +12-V-Stromversorgungsanschluss (Batterie) an, an dem immer Spannung anliegt.
Achten Sie darauf, die schwarze Massleitung zuerst an die Batterie oder die Verteilerblockmasse anzuschließen.

❼ An den +12-V-Stromversorgungsanschluss, an dem immer Spannung anliegt
Achten Sie darauf, die schwarze Massleitung zuerst an die Batterie oder die Verteilerblockmasse anzuschließen.

Hinweise zu den Steuer- und Stromversorgungsleitungen
- *Die Motorantennen-Steuerleitung (blau) liefert +12 Volt Gleichstrom, wenn Sie den Tuner einschalten.*
- *Es kann nur eine Motorantenne mit Relaiskästchen angeschlossen werden.*

Stromversorgung des Speichers
Wenn die gelbe Stromversorgungsleitung angeschlossen ist, wird der Speicher stets (auch bei ausgeschalteter Zündung) mit Strom versorgt.

Hinweise zum Lautsprecheranschluss
- *Schalten Sie das Gerät aus, bevor Sie die Lautsprecher anschließen.*
- *Verwenden Sie Lautsprecher mit einer Impedanz zwischen 4 und 8 Ohm und ausreichender Belastbarkeit. Ansonsten können die Lautsprecher beschädigt werden.*
- *Verbinden Sie die Lautsprecheranschlüsse nicht mit dem Bootschassis und verbinden Sie auch nicht die Anschlüsse des rechten mit denen des linken Lautsprechers.*
- *Verbinden Sie die Masseleitung dieses Geräts nicht mit dem negativen (–) Lautsprecheranschluss.*
- *Versuchen Sie nicht, Lautsprecher parallel anzuschließen.*
- *An die Lautsprecheranschlüsse dieses Geräts dürfen nur Passivlautsprecher angeschlossen werden. Schließen Sie keine Aktivlautsprecher (Lautsprecher mit eingebauten Verstärkern) an, da das Gerät sonst beschädigt werden könnte.*
- *Um Fehlfunktionen zu vermeiden, verwenden Sie nicht die im Boot installierten, integrierten Lautsprecherleitungen, wenn am Ende eine gemeinsame negative (–) Leitung für den rechten und den linken Lautsprecher verwendet wird.*
- *Verbinden Sie nicht die Lautsprecherkabel des Geräts miteinander.*

Hinweis zum Anschließen
Wenn Lautsprecher und Verstärker nicht richtig angeschlossen sind, erscheint „FAILURE" im Display. Vergewissern Sie sich in diesem Fall, dass Lautsprecher und Verstärker richtig angeschlossen sind.

Aansluitschema 3

❶ Naar aarding van accu of verdeelkast
Sluit eerst de zwarte aardingskabel aan en vervolgens de gele en rode voedingskabels.

❷ Naar de bedieningskabel van de elektrische antenne of voedingskabel van de antenneversterker
Opmerkingen
- *Het is niet nodig deze kabel aan te sluiten als er geen elektrische antenne of antenneversterker is, of bij een telescoopantenne die handmatig wordt bediend.*
- *Zie "Opmerkingen over de bedienings- en voedingskabels" als uw boot beschikt over een ingebouwde FM-/AM-antenne.*

❸ Naar AMP REMOTE IN van een optionele eindversterker
Deze aansluiting is alleen bedoeld voor versterkers. Door een ander systeem aan te sluiten kan het apparaat worden beschadigd.

❹ Naar het interface-snoer van een telefoon

❺ Naar het verlichtingssignaal
Zorg ervoor dat u eerst de zwarte aardingskabel aansluit op de aarding van de accu of de verdeelkast.

❻ Naar de +12 V voedingsaansluiting die stroom ontvangt in de accessoirepositie (ACC) van de contactschakelaar
Opmerking
Als er geen accessoirepositie (ACC) is, moet u verbinding maken met de +12 V voedingsaansluiting (accu) die altijd stroom ontvangt.
Zorg ervoor dat u eerst de zwarte aardingskabel aansluit op de aarding van de accu of de verdeelkast.

❼ Naar de +12 V voedingsaansluiting die altijd stroom ontvangt
Zorg ervoor dat u eerst de zwarte aardingskabel aansluit op de aarding van de accu of de verdeelkast.

Opmerkingen over de bedienings- en voedingskabels
- *De bedieningskabel van de elektrische antenne (blauw) levert +12 V gelijkstroom wanneer u de tuner inschakelt.*
- *Met dit apparaat is het niet mogelijk een elektrische antenne zonder relaiskast te gebruiken.*

Instandhouden van het geheugen
Zolang de gele stroomdraad is aangesloten, blijft de stroomvoorziening van het geheugen intact, ook wanneer het contact wordt uitgeschakeld.

Opmerkingen betreffende het aansluiten van de luidsprekers
- *Zorg dat het apparaat is uitgeschakeld, alvorens de luidsprekers aan te sluiten.*
- *Gebruik luidsprekers met een impedantie van 4 tot 8 Ohm en let op dat die het vermogen van de versterker kunnen verwerken. Als u dit niet doet, kunnen de luidsprekers ernstig beschadigd raken.*
- *Verbind de aansluitingen van de luidsprekers niet met de romp van de boot en sluit de aansluitingen van de rechter- en linkerluidspreker niet op elkaar aan.*
- *Verbind de aarddraad van dit apparaat niet met de negatieve (–) aansluiting van de luidspreker.*
- *Probeer nooit de luidsprekers parallel aan te sluiten.*
- *Sluit geen actieve luidsprekers (met ingebouwde versterkers) aan op de luidsprekeraansluiting van dit apparaat. Dit zal leiden tot beschadiging van de actieve luidsprekers. Sluit dus altijd uitsluitend luidsprekers zonder ingebouwde versterker aan.*
- *Om defecten te vermijden mag u de ingebouwde luidsprekerbedrading in de boot niet gebruiken wanneer er een gemeenschappelijke negatieve (–) draad is voor de rechter- en linkerluidsprekers.*
- *Verbind de luidsprekerdraden niet met elkaar.*

Opmerking over aansluiten
Als de luidspreker en versterker niet correct zijn aangesloten, wordt "FAILURE" in het display weergegeven. In dit geval moet u zorgen dat de luidspreker en versterker correct zijn aangesloten.

- **CONNECTIONS**
- **CDX-MR60UI**

3

**1 Note for the antenna (aerial) connecting*
If your boat antenna (aerial) is an ISO (International Organization for Standardization) type, use the supplied adaptor Ⓕ to connect it. First connect the boat antenna (aerial) to the supplied adaptor, then connect it to the antenna (aerial) jack of the master unit.
**2 RCA pin cord (not supplied)*
**3 Insert with the cord upwards.*
**4 Supplied with the marine remote commander.*
**5 Supplied with XA-C40*
**6 The RM-X4S, RM-X60M and RM-X11M cannot be connected to this unit at the same time.*

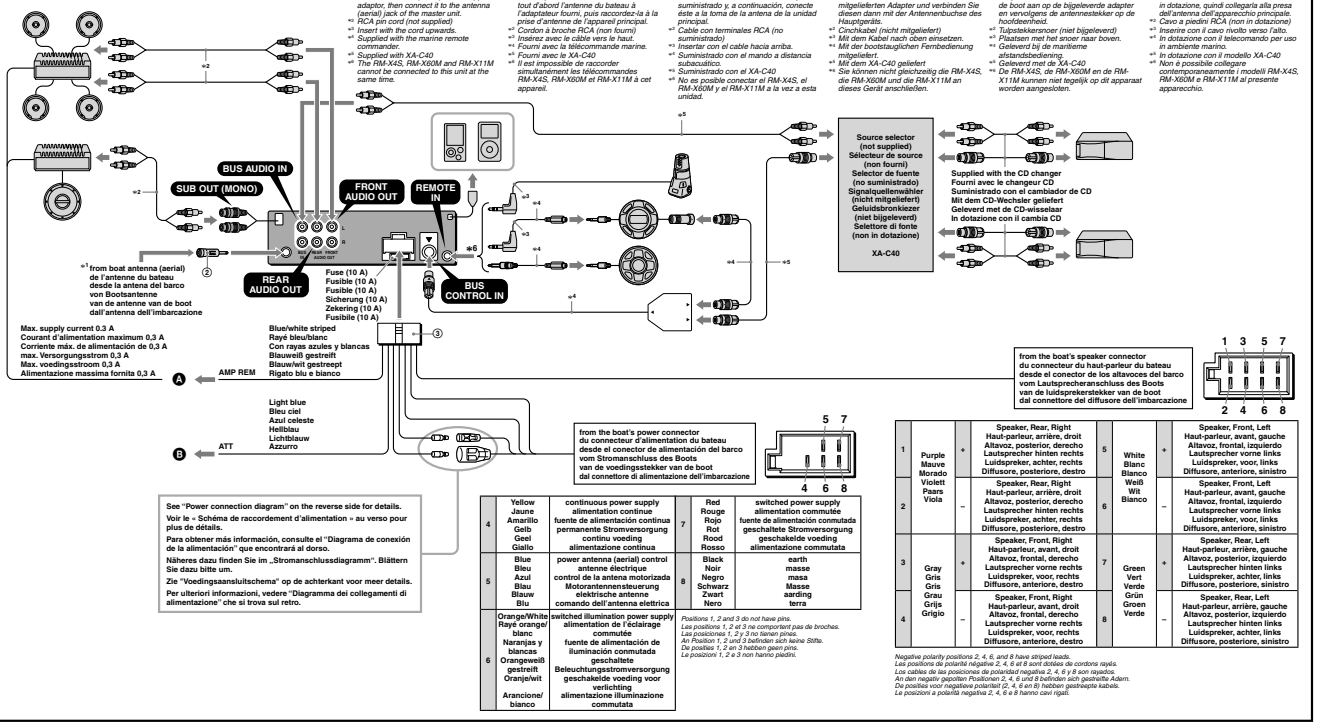
**1 Remarque sur le raccordement de l'antenne*
Si l'antenne de votre bateau est de type ISO (Organisation internationale de normalisation), raccordez-la à l'aide de l'adaptateur fourni Ⓕ. Raccordez tout d'abord l'antenne du bateau à l'adaptateur fourni, puis raccordez-la à la prise d'antenne de l'appareil principal.
**2 Cordon à broche RCA (non fourni)*
**3 Insérez avec le câble vers le haut.*
**4 Fourni avec la télécommande marine.*
**5 Fourni avec le XA-C40*
**6 Il est impossible de raccorder simultanément les télécommandes RM-X4S, RM-X60M et RM-X11M à cet appareil.*

**1 Nota para la conexión de la antena*
Si la antena del barco cumple con la norma ISO (Organización internacional de normalización), utilice el adaptador suministrado Ⓕ para conectarla. Primero conecte la antena del barco al adaptador suministrado y, a continuación, conecte éste a la toma de la antena de la unidad principal.
**2 Cable con terminales RCA (no suministrado)*
**3 Insertar con el cable hacia arriba.*
**4 Suministrado con el mando a distancia subacuático.*
**5 Suministrado con el XA-C40*
**6 No es posible conectar el RM-X4S, el RM-X60M y el RM-X11M a la vez a esta unidad.*

**1 Hinweis zum Anschließen der Antenne*
Wenn Ihre Bootsantenne der ISO-Norm (Internationale Normungsgemeinschaft) entspricht, schließen Sie sie mithilfe des mitgelieferten Adapters Ⓕ an. Verbinden Sie zuerst die Bootsantenne mit dem mitgelieferten Adapter und verbinden Sie diesen dann mit der Antennenbuchse des Hauptgeräts.
**2 Cinchkabel (nicht mitgeliefert)*
**3 Mit dem Kabel nach oben einsetzen.*
**4 Mit der bootstauglichen Fernbedienung mitgeliefert.*
**5 Mit dem XA-C40 geliefert*
**6 Sie können nicht gleichzeitig die RM-X4S, die RM-X60M und die RM-X11M an dieses Gerät anschließen.*

**1 Opmerking bij de antenne-aansluiting*
Als uw boot is uitgerust met een antenne van het type ISO (International Organization for Standardization), moet u deze aansluiten met de bijgeleverde adapter Ⓕ. Sluit eerst de antenne van de boot aan op de bijgeleverde adapter en vervolgens de antennestekker op de hoofdeenheid.
**2 Tulpstekkersnoer (niet bijgeleverd)*
**3 Plaatsen met het snoer naar boven.*
**4 Geleverd bij de marifieme afstandsbediening.*
**5 Geleverd met de XA-C40*
**6 De RM-X4S, de RM-X60M en de RM-X11M kunnen niet tegelijk op dit apparaat worden aangesloten.*

**1 Nota per il collegamento dell'antenna*
Se l'antenna dell'imbarcazione è di tipo ISO (International Organization for Standardization), utilizzare l'adattatore Ⓕ in dotazione per collegarla. Collegare prima l'antenna dell'imbarcazione all'adattatore in dotazione, quindi collegarla alla presa dell'antenna dell'apparecchio principale.
**2 Cavo a piedini RCA (non in dotazione)*
**3 Inserire con il cavo rivolto verso l'alto.*
**4 In dotazione con il telecomando per uso in ambiente marino.*
**5 In dotazione con il modello XA-C40*
**6 Non è possibile collegare contemporaneamente i modelli RM-X4S, RM-X60M e RM-X11M al presente apparecchio.*


BUS AUDIO IN
SUB OUT (MONO)
FRONT AUDIO OUT
REMOTE IN
REAR AUDIO OUT
BUS CONTROL IN
*1 from boat antenna (aerial) de l'antenne du bateau desde la antena del barco von Bootsantenne van de antenne van de boot dall'antenna dell'imbarcazione
Fuse (10 A) Fusible (10 A) Fusible (10 A) Sicherung (10 A) Zekering (10 A) Fusible (10 A)
Source selector (not supplied) Sélecteur de source (non fourni) Selector de fuente (no suministrado) Signalquellenwähler (nicht mitgeliefert) Geluidsbronkiezer (niet bijgeleverd) Selettore di fonte (non in dotazione)
XA-C40
Supplied with the CD changer Fourni avec le changeur CD Suministrado con el cambiador de CD Mit dem CD-Wechsler geliefert Geleverd met de CD-wisselaar In dotazione con il cambia CD
Max. supply current 0,3 A
Courant d'alimentation maximum 0,3 A
Corriente máx. de alimentación de 0,3 A
max. Versorgungsstrom 0,3 A
Max. voedingsstroom 0,3 A
Alimentazione massima fornita 0,3 A
Blue/white striped Rayé bleu/blanc Con rayas azules y blancas Blauweiß gestreift Blauw/wit gestreept Rigato blu e bianco
AMP REM
Light blue Bleu ciel Azul celeste Hellblau Lichtblauw Azzurro
ATT
from the boat's power connector du connecteur d'alimentation du bateau desde el conector de alimentación del barco vom Stromanschluss des Boots van de voedingssteekker van de boot dal connettore di alimentazione dell'imbarcazione
from the boat's speaker connector du connecteur du haut-parleur du bateau desde el conector de los altavoces del barco vom Lautsprecheranschluss des Boots van de luidsprekersteker van de boot dal connettore dell'diffusore dell'imbarcazione

See "Power connection diagram" on the reverse side for details.
Voir le « Schéma de raccordement d'alimentation » au verso pour plus de détails.
Para obtener más información, consulte el "Diagrama de conexión de la alimentación" que encontrará al dorso.
Näheres dazu finden Sie im „Stromanschlussdiagramm". Blättern Sie dazu bitte um.
Zie "Voedingsaansluitschema" op de achterkant voor meer details.
Per ulteriori informazioni, vedere "Diagramma dei collegamenti di alimentazione" che si trova sul retro.

4	Yellow Jaune Amarillo Geib Geel Giallo	continuous power supply alimentation continue fuente de alimentación continua permanente Stromversorgung continu voeding alimentazione continua	7	Red Rouge Rojo Rot Rood Rosso	switched power supply alimentation commutée fuente de alimentación conmutada geschaltete Stromversorgung geschakelde voeding alimentazione commutata
5	Blue Bleu Azul Blau Blauw Blu	power antenna (aerial) control antenne électrique control de la antena motorizada Motorantennensteuerung elektrische antenne comando dell'antenna elettrica	8	Black Noir Negro Schwarz Zwart Nero	earth masse masa Masse aarding terra
6	Orange/White Rayé orange/blanc Naranjas y blancas Orangeweiß gestreift Oranje/wit Arancione/bianco	switched illumination power supply alimentation de l'éclairage commutée fuente de alimentación de iluminación conmutada geschaltete Beleuchtungsstromversorgung geschakelde voeding voor verlichting alimentazione illuminazione commutata			

Positions 1, 2 and 3 do not have pins.
Les positions 1, 2 et 3 ne comportent pas de broches.
Las posiciones 1, 2 y 3 no tienen pines.
An Position 1, 2 und 3 befinden sich keine Stifte.
De posities 1, 2 en 3 hebben geen pins.
Le posizioni 1, 2 e 3 non hanno piedini.

1	Purple Mauve Morado Violett Paars Viola	+	Speaker, Rear, Right Haut-parleur, arrière, droit Altavoz, posterior, derecho Lautsprecher hinten rechts Luidspreker, achter, rechts Diffusore, posteriore, destro	5	White Blanco Bianco Weiß Wit Bianco	+	Speaker, Front, Left Haut-parleur, avant, gauche Altavoz, frontal, izquierdo Lautsprecher vorne links Luidspreker, voor, links Diffusore, anteriore, sinistro
2		–	Speaker, Rear, Right Haut-parleur, arrière, droit Altavoz, posterior, derecho Lautsprecher hinten rechts Luidspreker, achter, rechts Diffusore, posteriore, destro	6		–	Speaker, Front, Left Haut-parleur, avant, gauche Altavoz, frontal, izquierdo Lautsprecher vorne links Luidspreker, voor, links Diffusore, anteriore, sinistro
3	Gray Gris Gris Grau Grijs Grigio	+	Speaker, Front, Right Haut-parleur, avant, droit Altavoz, frontal, derecho Lautsprecher vorne rechts Luidspreker, voor, rechts Diffusore, anteriore, destro	7	Green Vert Verde Grün Groen Verde	+	Speaker, Rear, Left Haut-parleur, arrière, gauche Altavoz, posterior, izquierdo Lautsprecher hinten links Luidspreker, achter, links Diffusore, posteriore, sinistro
4		–	Speaker, Front, Right Haut-parleur, avant, droit Altavoz, frontal, derecho Lautsprecher vorne rechts Luidspreker, voor, rechts Diffusore, anteriore, destro	8		–	Speaker, Rear, Left Haut-parleur, arrière, gauche Altavoz, posterior, izquierdo Lautsprecher hinten links Luidspreker, achter, links Diffusore, posteriore, sinistro

Negative polarity positions 2, 4, 6, and 8 have striped leads.
Les positions de polarité négative 2, 4, 6 et 8 sont dotées de cordons rayés.
Los cables de las posiciones de polaridad negativa 2, 4, 6 y 8 son rayados.
An den negativ gepolten Positionen 2, 4, 6 und 8 befinden sich gestreifte Adern.
De posities voor negatieve polariteit (2, 4, 6 en 8) hebben gestreepte kabels.
Le posizioni a polarità negativa 2, 4, 6 e 8 hanno cavi rigati.

Connection diagram 3

A To AMP REMOTE IN of an optional power amplifier
This connection is only for amplifiers. Connecting any other system may damage the unit.
B To the interface cable of a telephone

Warning

If you have a power antenna (aerial) without a relay box, connecting this unit with the supplied power connecting lead Ⓐ may damage the antenna (aerial).

Notes on the control and power supply leads
- *The power antenna (aerial) control lead (blue) supplies +12 V DC when you turn on the tuner, or when you activate the AF (Alternative Frequency) or TA (Traffic Announcement) function.*
- *When your boat has built-in FM/MW/LW antenna (aerial) in the rear/side glass, connect the power antenna (aerial) control lead (blue) or the accessory power supply lead (red) to the power terminal of the existing antenna (aerial) booster. For details, consult your dealer.*
- *A power antenna (aerial) without a relay box cannot be used with this unit.*

Memory hold connection
When the yellow power supply lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the boat chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the ground (earth) lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker leads installed in your boat if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker leads to each other.*

Note on connection
If speaker and amplifier are not connected correctly, "FAILURE" appears in the display. In this case, make sure the speaker and amplifier are connected correctly.

Schémas de raccordement 3

A Au niveau du AMP REMOTE IN d'un amplificateur de puissance facultatif
Ce raccordement existe seulement pour les amplificateurs. Le raccordement à tout autre système peut endommager l'appareil.
B Vers le cordon d'interface d'un téléphone

Avertissement

Si vous disposez d'une antenne électrique sans boîtier de relais, le branchement de cet appareil au moyen du cordon d'alimentation fourni Ⓐ risque d'endommager l'antenne.

Remarques sur les câbles de commande et d'alimentation
- *Le câble de commande (bleu) fournit du courant continu de +12 V lorsque vous mettez le tuner sous tension ou lorsque vous activez la fonction AF (Fréquences alternatives) ou TA (Messages de radiodiffusion).*
- *Lorsque votre bateau est équipé d'une antenne FM/MW (PO/LW (GO) intégrée dans la vitre arrière/latérale, raccordez le câble de commande d'antenne électrique (bleu) ou le câble d'alimentation des accessoires (rouge) à la borne d'alimentation de l'amplificateur d'antenne existant. Pour plus de détails, consultez votre revendeur.*
- *Une antenne électrique sans boîtier de relais ne peut pas être utilisée avec cet appareil.*

Raccordement pour la conservation de la mémoire
Lorsque le câble de commande d'antenne jaune est connecté, la circuit de la mémoire est alimenté en permanence même si la clé de contact est en position d'arrêt.

Remarques sur le raccordement des haut-parleurs
- *Avant de raccorder les haut-parleurs, mettre l'appareil hors tension.*
- *Utilisez des haut-parleurs ayant une impédance de 4 à 8 ohms et une capacité adéquate sous peine de les endommager.*
- *Ne raccordez pas les bornes des haut-parleurs au châssis du bateau, et ne raccordez pas les bornes du haut-parleur droit à celles du haut-parleur gauche.*
- *Ne raccordez pas le câble de mise à la masse de cet appareil à la borne négative (–) du haut-parleur.*
- *Ne tentez pas de raccorder les haut-parleurs en parallèle.*
- *Connectez uniquement des haut-parleurs passifs. La connexion de haut-parleurs actifs (avec des amplificateurs intégrés) aux bornes des haut-parleurs pourrait endommager l'appareil.*
- *Pour éviter tout problème de fonctionnement, n'utilisez pas les câbles des haut-parleurs intégrés installés dans votre bateau si l'appareil dispose d'un câble négatif commun (–) pour les haut-parleurs droit et gauche.*
- *Ne raccordez pas entre eux les cordons des haut-parleurs de l'appareil.*

Remarque sur le raccordement
Si les haut-parleurs et l'amplificateur ne sont pas raccordés correctement, le message « FAILURE » s'affiche. Dans ce cas, assurez-vous que les haut-parleurs et l'amplificateur sont raccordés correctement.

Diagrama de conexión 3

A A AMP REMOTE IN de un amplificador de potencia opcional
Esta conexión es sólo para amplificadores. La conexión de cualquier otro sistema puede dañar la unidad.
B Al cable de interfaz de un teléfono

Advertencia

Si la antena motorizada no dispone de caja de relé, es posible que la conexión de esta unidad mediante el cable de alimentación suministrado Ⓐ provoque daños en la antena.

Notas sobre los cables de control y de fuente de alimentación
- *El cable de control de la antena motorizada (azul) suministrará cc de +12 V cuando encienda el sintonizador o active la función AF (Frecuencias alternativas) o TA (Notificación de tráfico).*
- *Si el barco tiene una antena de FM/MW/LW incorporada en el cristal trasero/lateral, conecte el cable de control de la antena motorizada (azul) o el cable de fuente de alimentación auxiliar (roja) al terminal de alimentación del amplificador de señal de la antena existente. Para obtener más información, consulte a su distribuidor.*
- *Con esta unidad no es posible utilizar una antena motorizada sin caja de relé.*

Conexión para protección de la memoria
Si conecta el cable de fuente de alimentación amarillo, el circuito de la memoria recibirá siempre alimentación, aunque apague el interruptor de encendido.

Notas sobre la conexión de los altavoces
- *Antes de conectar los altavoces, desconecte la alimentación de la unidad.*
- *Utilice altavoces con una impedancia de 4 a 8 ? con la capacidad de potencia adecuada para evitar que se dañen.*
- *No conecte los terminales de altavoz al chasis del barco, ni conecte los terminales del altavoz derecho con los del izquierdo.*
- *No conecte el cable de conexión a masa de esta unidad al terminal negativo (–) del altavoz.*
- *No intente conectar los altavoces en paralelo.*
- *Conecte solamente altavoces pasivos. Si conecta altavoces activos (con amplificadores incorporados) a los terminales de altavoz, puede dañar la unidad.*
- *Para evitar fallos de funcionamiento, no utilice los cables de altavoz incorporados instalados en el barco si su unidad comparte un cable negativo común (–) para los altavoces derecho e izquierdo.*
- *No conecte los cables de altavoz de la unidad entre sí.*

Nota sobre la conexión
Si el altavoz no está conectado correctamente, aparecerá "FAILURE" en la pantalla. Si es así, compruebe la conexión del altavoz.

Anschlussdiagramm 3

A An AMP REMOTE IN des gesondert erhältlichen Endverstärkers
Dieser Anschluss ist ausschließlich für Verstärker gedacht. Schließen Sie nichts anderes daran an. Andernfalls kann das Gerät beschädigt werden.
B An das Schnittstellenkabel eines Telefons

Warnung

Wenn Sie eine Motorantenne ohne Relaiskästchen verwenden, kann durch Anschließen dieses Geräts mit dem mitgelieferten Stromversorgungskabel Ⓐ die Antenne beschädigt werden.

Hinweise zu den Steuer- und Stromversorgungsleitungen
- *Die Motorantennen-Steuerleitung (blau) liefert +12 V Gleichstrom, wenn Sie den Tuner einschalten oder die AF- (Alternativ-frequenzsuche) oder die TA-Funktion (Verkehrsdurchsagen) aktivieren.*
- *Wenn das Boot mit einer in der Heck-/Seitenfensterscheibe integrierten FM (UKW)/MW/LW-Antenne ausgestattet ist, schließen Sie die Motorantennen-Steuerleitung (blau) oder die Zubehörstromversorgungsleitung (rot) an den Stromversorgungs anschluss des vorhandenen Antennenverstärkers an. Nähreres dazu erfahren Sie bei Ihrem Händler.*
- *Es kann nur eine Motorantenne mit Relaiskästchen angeschlossen werden.*

Stromversorgung des Speichers
Wenn die gelbe Stromversorgungsleitung angeschlossen ist, wird der Speicher stets (auch bei ausgeschalteter Zündung) mit Stromversorgt.

Hinweise zum Lautsprecheranschluss
- *Schalten Sie das Gerät aus, bevor Sie die Lautsprecher anschließen.*
- *Verwenden Sie Lautsprecher mit einer Impedanz zwischen 4 und 8 Ohm und ausreichender Belastbarkeit. Ansonsten können die Lautsprecher beschädigt werden.*
- *Verbinden Sie die Lautsprecheranschlüsse nicht mit dem Bootschassis und verbinden Sie auch nicht die Anschlüsse des rechten mit denen des linken Lautsprechers.*
- *Verbinden Sie die Masseleitung dieses Geräts nicht mit dem negativen (–) Lautsprecheranschluss.*
- *Versuchen Sie nicht, Lautsprecher parallel anzuschließen.*
- *An die Lautsprecheranschlüsse dieses Geräts dürfen nur Passivlautsprecher angeschlossen werden. Schließen Sie keine Aktivlautsprecher (Lautsprecher mit eingebauten Verstärkern) an, da das Gerät sonst beschädigt werden könnte.*
- *Um Fehlfunktionen zu vermeiden, verwenden Sie nicht die im Boot installierten, integrierten Lautsprecherleitungen, wenn am Ende eine gemeinsame negative (–) Leitung für den rechten und den linken Lautsprecher verwendet wird.*
- *Verbinden Sie nicht die Lautsprecherkabel des Geräts miteinander.*

Hinweis zum Anschließen
Wenn Lautsprecher und Verstärker nicht richtig angeschlossen sind, erscheint „FAILURE" im Display. Vergewissern Sie sich in diesem Fall, dass Lautsprecher und Verstärker richtig angeschlossen sind.

Aansluitschema 3

A Naar AMP REMOTE IN van een optionele eindversterker
Deze aansluiting is alleen bedoeld voor versterkers. Door een ander systeem aan te sluiten kan het apparaat worden beschadigd.
B Naar het interface-snoer van een telefoon

Waarschuwing

Indien u een elektrische antenne hebt zonder relaiskast, kan het aansluiten van dit apparaat met het bijgeleverde netsnoer Ⓐ de antenne beschadigen.

Aanwijzingen over de bediethings- en voedingskabels
- *De antennevoedingskabel (blauw) levert +12 V gelijkstroom wanneer u de tuner inschakelt of de AF (Alternative Frequency) of TA (Traffic Announcement) functie activeert.*
- *Wanneer uw boot is uitgerust met een FM/MW/LW-antenne in de achterruit/zijruit, moet u de antennevoedingskabel (blauw) of de hulpvoedingskabel (rood) aansluiten op de voedingsingang van de bestaande antenneversterker. Raadpleeg de handelaar voor meer informatie.*
- *Met dit apparaat is het niet mogelijk een automatische antenne zonder relaiskast te gebruiken.*

Instandhouden van het geheugen
Zolang de gele stroomdraad is aangesloten, blijft de stroomvoorziening van het gehaugen intact, ook wanneer het contact wordt uitgeschakeld.

Opmerkingen betreffende het aansluiten van de luidsprekers
- *Zorg dat het apparaat is uitgeschakeld, alvorens de luidsprekers aan te sluiten.*
- *Gebruik luidsprekers met een impedantie van 4 tot 8 Ohm en let op dat die het vermogen van de versterker kunnen verwerken. Als u dit niet doet, kunnen de luidsprekers ernstig beschadigd raken.*
- *Verbind de aansluitingen van de luidsprekers niet met de romp van de boot en sluit de aansluitingen van de rechter- en linkerluidspreker niet op elkaar aan.*
- *Verbind de aarddraad van dit apparaat niet met de negatieve (–) aansluiting van de luidspreker.*
- *Probeer nooit de luidsprekers parallel aan te sluiten.*
- *Sluit geen actieve luidsprekers (met ingebouwde versterkers) aan op de luidsprekeraansluiting van dit apparaat. Dit zal leiden tot beschadiging van de actieve luidsprekers. Sluit dus altijd uitsluitend luidsprekers zonder ingebouwde versterker aan.*
- *Om defecten te vermijden mag u de ingebouwde luidsprekerbedrading in de boot niet gebruiken wanneer er een gemeenschappelijke negatieve (–) draad is voor de rechter- en linkerluidsprekers.*
- *Verbind de luidsprekerdraden niet met elkaar.*

Opmerking over aansluiten
Als de luidsprekers en versterker niet correct zijn aangesloten, wordt "FAILURE" in het display weergegeven. In dit geval moet u zorgen dat de luidsprekers en versterker correct zijn aangesloten.

Schema di collegamento 3

A A AMP REMOTE IN di un amplificatore di potenza opzionale
Questo collegamento è riservato esclusivamente agli amplificatori. Non collegare un tipo di sistema diverso onde evitare di causare danni all'apparecchio.
B Al cavo di interfaccia di un telefono

Avvertenza

Quando si collega l'apparecchio con il cavo di alimentazione in dotazione Ⓐ, si potrebbe danneggiare l'antenna elettrica se questa non dispone di scatola a relè.

Note sui cavi di controllo e di alimentazione
- *Il cavo (blu) di controllo dell'antenna elettrica fornisce alimentazione pari a +12 V CC quando si attiva il sintonizzatore oppure la funzione TA (notiziario sul traffico) o AF (frequenza alternativa).*
- *Se l'imbarcazione dispone di un'antenna FM/MW/LW incorporata sul vetro laterale, collegare il cavo (blu) di controllo dell'antenna elettrica o il cavo (rosso) di ingresso dell'alimentazione accessoria al terminale di alimentazione del preamplificatore dell'antenna esistente. Per ulteriori informazioni, consultare il proprio fornitore.*
- *Non è possibile usare un'antenna elettrica senza scatola a relè con questo apparecchio.*

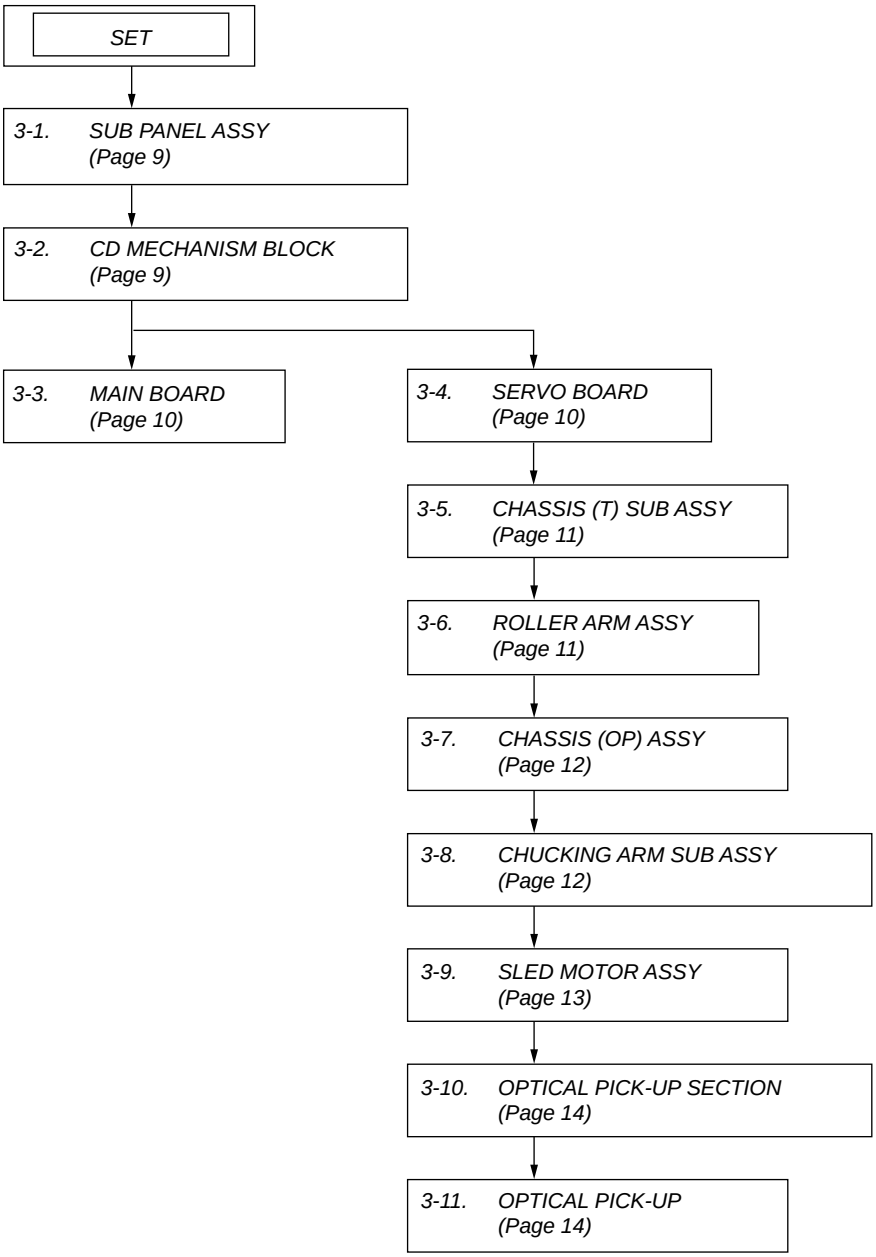
Collegamento per la conservazione della memoria
Quando il cavo di ingresso alimentazione giallo è collegato, viene sempre fornita alimentazione al circuito di memoria anche quando l'interruttore di accensione è spento.

Note sul collegamento dei diffusori
- *Prima di collegare i diffusori spegnere l'apparecchio.*
- *Usare diffusori di impedenza compresa tra 4 e 8 ohm e con capacità di potenza adeguata, altrimenti i diffusori potrebbero venire danneggiati.*
- *Non collegare i terminali dei diffusori al telaio dell'imbarcazione e non collegare i terminali del diffusore destro con quelli del diffusore sinistro.*
- *Non collegare il cavo di terra di questo apparecchio al terminale negativo (–) del diffusore.*
- *Non collegare i diffusori in parallelo.*
- *Assicurarsi di collegare soltanto diffusori passivi, poichè il collegamento di diffusori attivi, dotati di amplificatori incorporati, ai terminali dei diffusori potrebbe danneggiare l'apparecchio.*
- *Onde evitare problemi di funzionamento, non utilizzare i cavi dei diffusori incorporati installati nell'imbarcazione se l'apparecchio condivide un cavo comune negativo (–) per i diffusori destro e sinistro.*
- *Non collegare fra loro i cavi dei diffusori dell'apparecchio.*

Nota sul collegamento
Se l'amplificatore e il diffusore non sono collegati correttamente, "FAILURE" viene visualizzato nel display. In tal caso, accertarsi che l'amplificatore e il diffusore siano collegati correttamente.

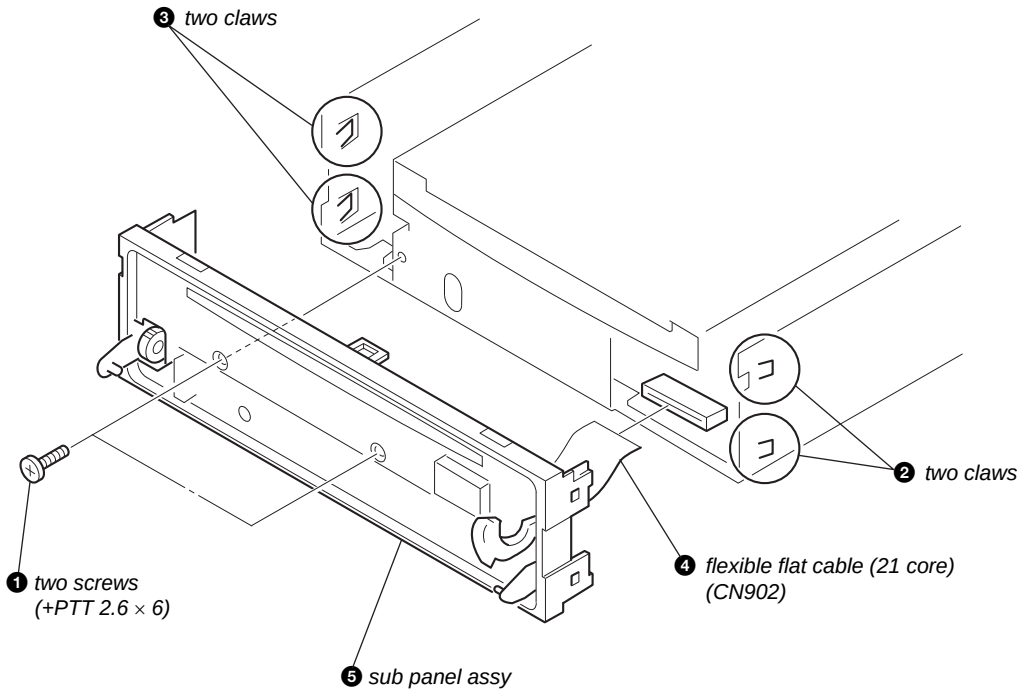
SECTION 3
DISASSEMBLY

- This set can be disassembled in the order shown below.

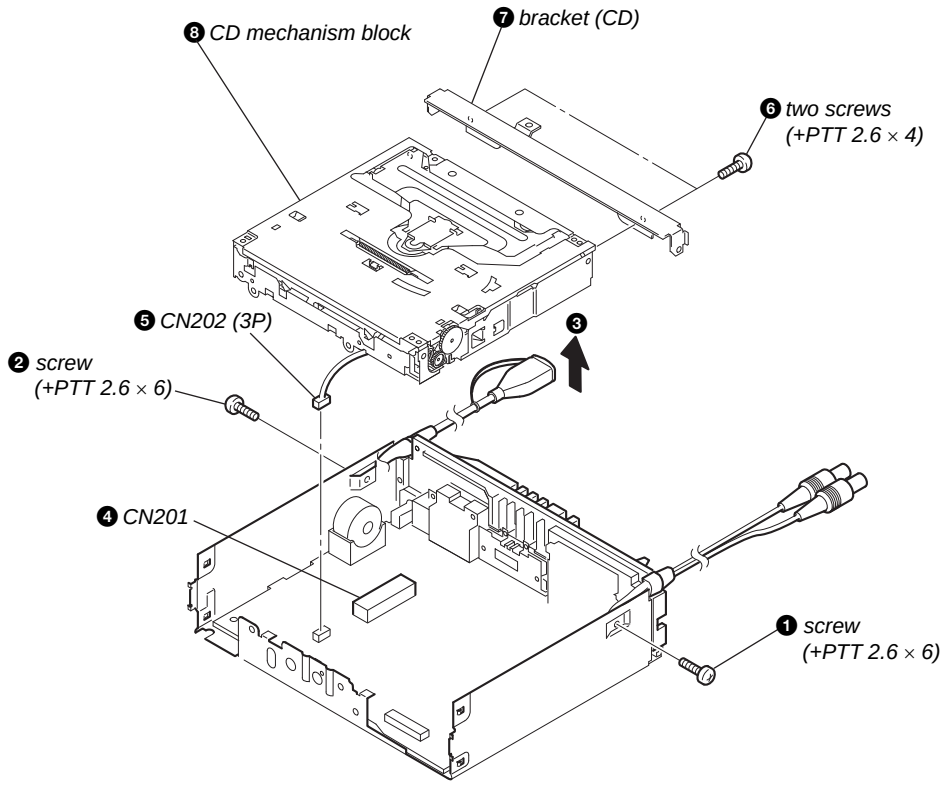

SET
3-1. SUB PANEL ASSY (Page 9)
3-2. CD MECHANISM BLOCK (Page 9)
3-3. MAIN BOARD (Page 10)
3-4. SERVO BOARD (Page 10)
3-5. CHASSIS (T) SUB ASSY (Page 11)
3-6. ROLLER ARM ASSY (Page 11)
3-7. CHASSIS (OP) ASSY (Page 12)
3-8. CHUCKING ARM SUB ASSY (Page 12)
3-9. SLED MOTOR ASSY (Page 13)
3-10. OPTICAL PICK-UP SECTION (Page 14)
3-11. OPTICAL PICK-UP (Page 14)

Note: Follow the disassembly procedure in the numerical order shown below.

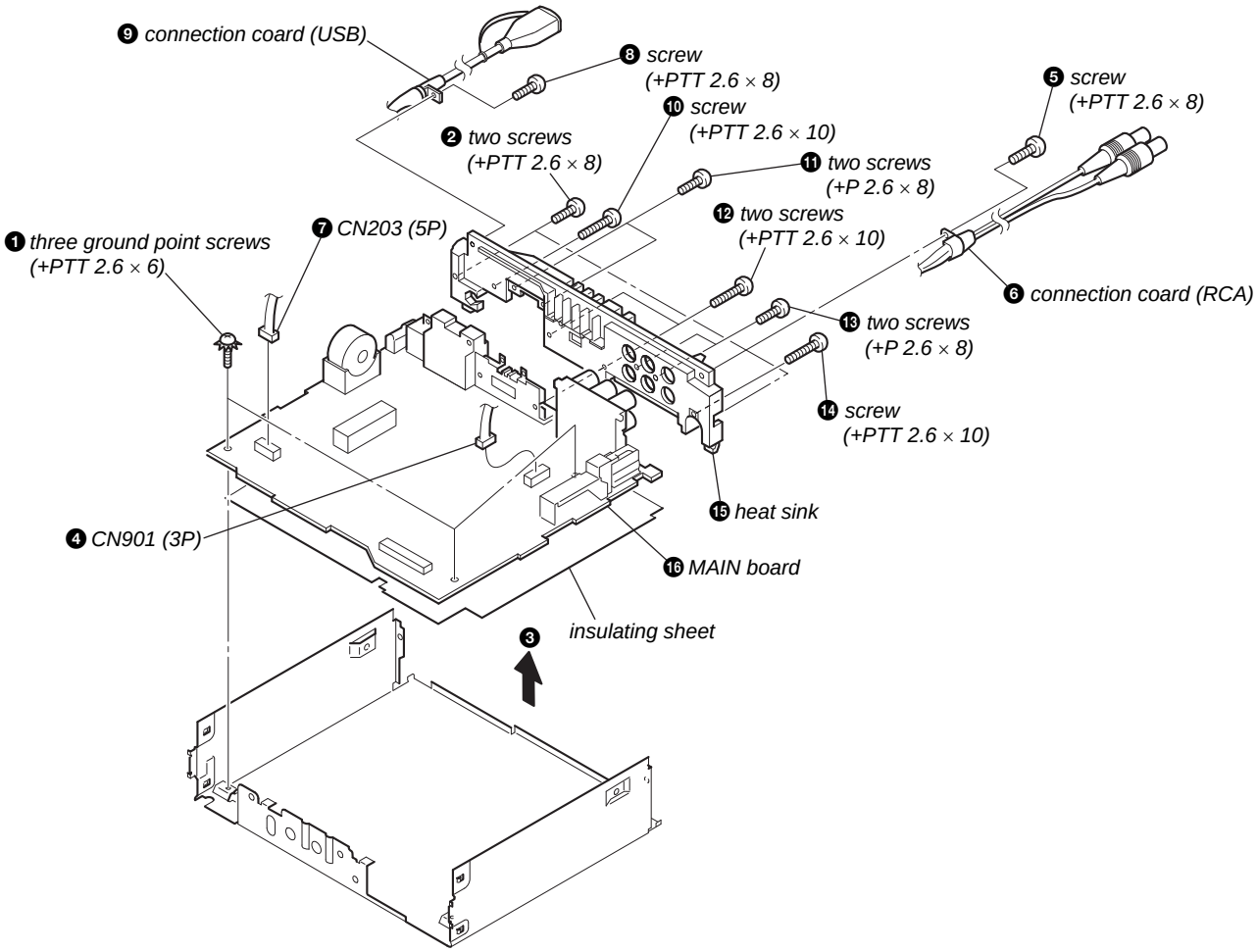
3-1. SUB PANEL ASSY



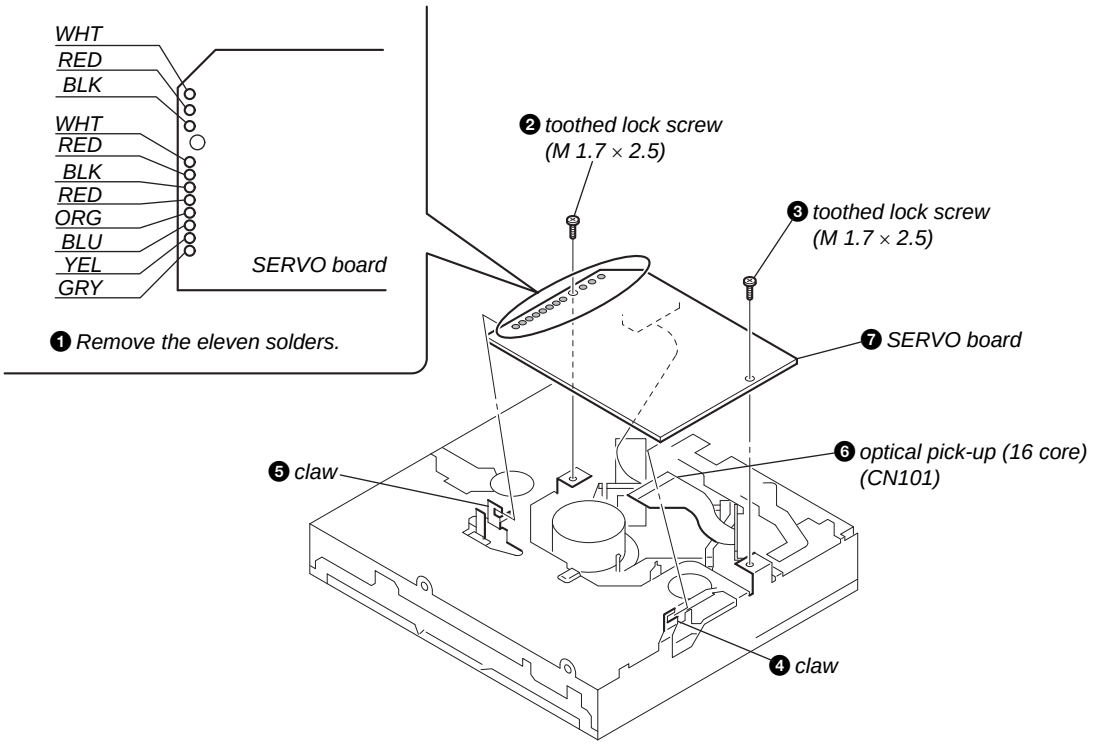
3-2. CD MECHANISM BLOCK



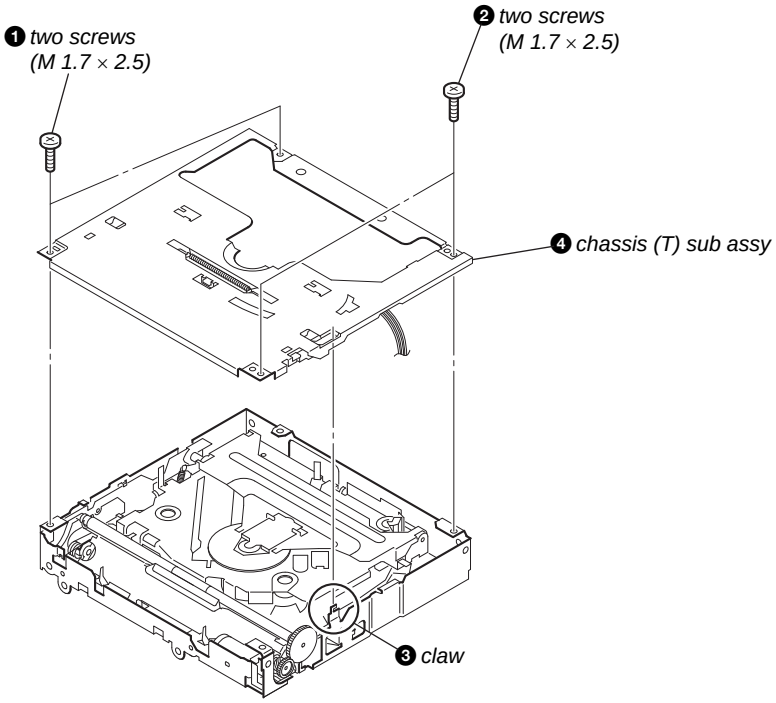
3-3. MAIN BOARD


❾ connection coard (USB)
❽ screw (+PTT 2.6 × 8)
❺ screw (+PTT 2.6 × 8)
❿ screw (+PTT 2.6 × 10)
❷ two screws (+PTT 2.6 × 8)
⓫ two screws (+P 2.6 × 8)
⓬ two screws (+PTT 2.6 × 10)
❶ three ground point screws (+PTT 2.6 × 6)
❼ CN203 (5P)
❻ connection coard (RCA)
⓭ two screws (+P 2.6 × 8)
⓮ screw (+PTT 2.6 × 10)
⓯ heat sink
❹ CN901 (3P)
⓰ MAIN board
insulating sheet
❸

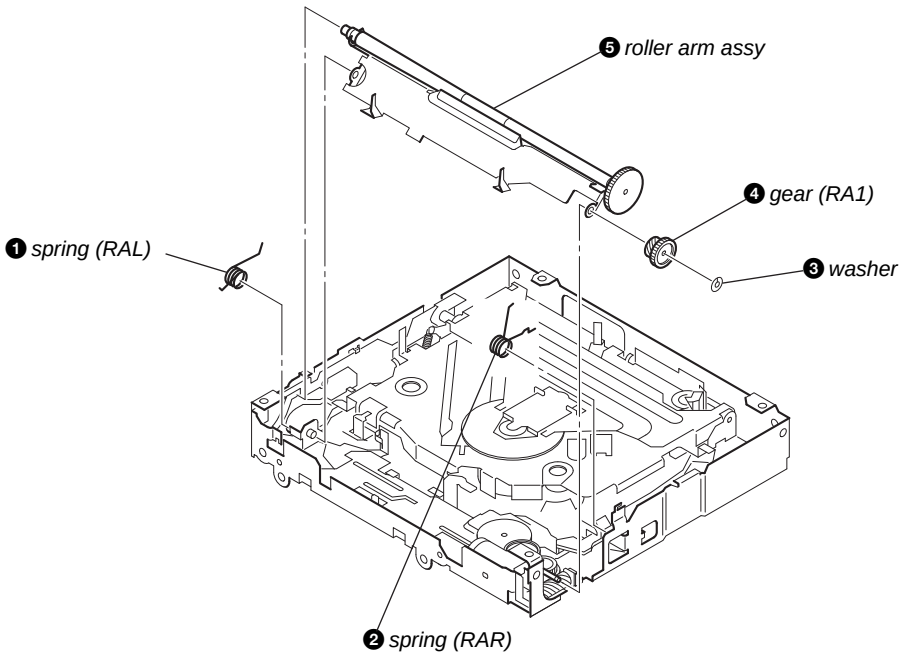
3-4. SERVO BOARD



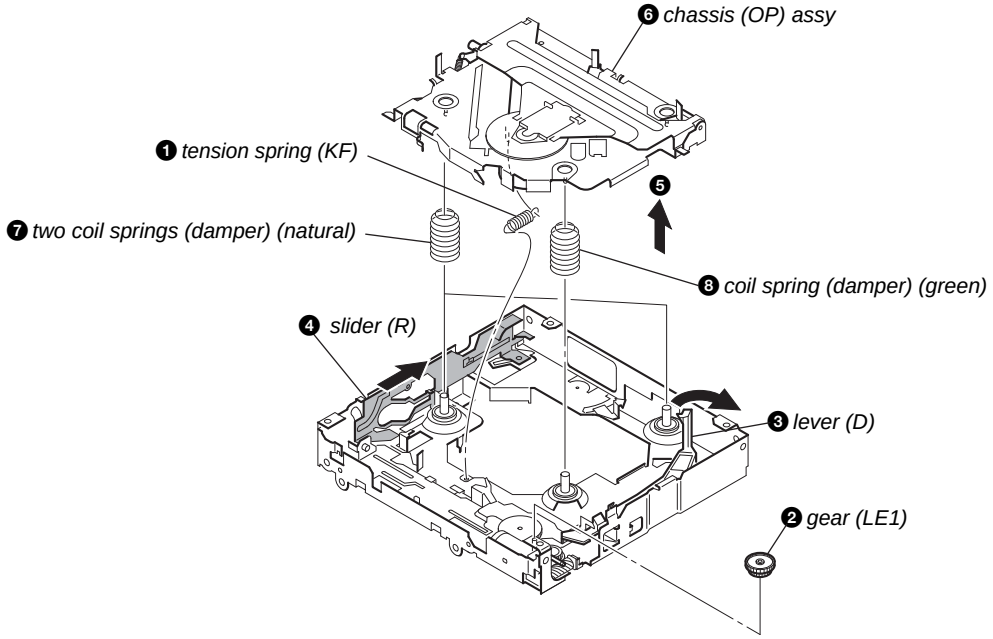
3-5. CHASSIS (T) SUB ASSY



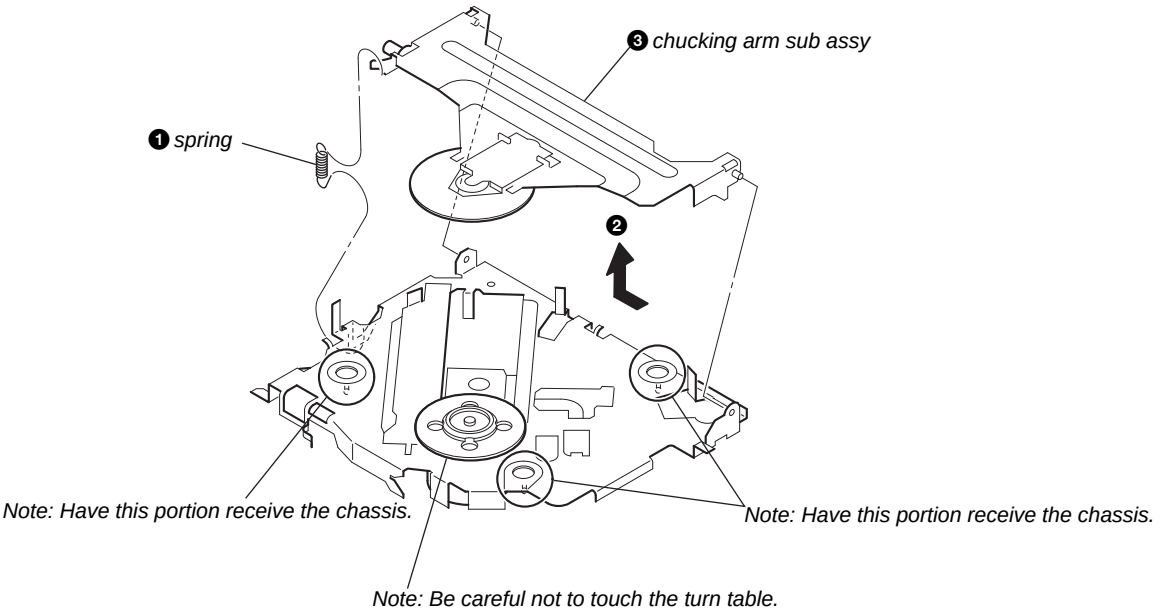
3-6. ROLLER ARM ASSY



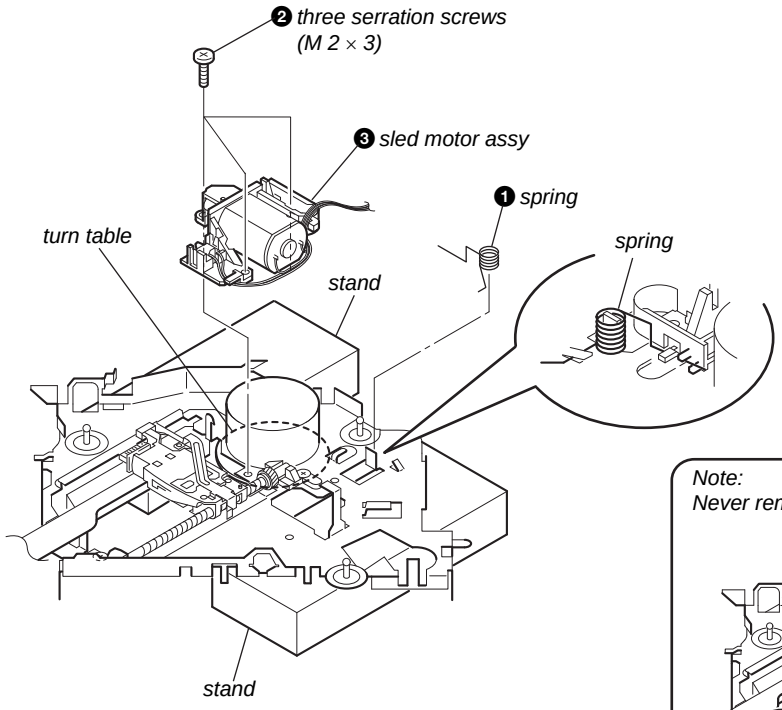
3-7. CHASSIS (OP) ASSY



3-8. CHUCKING ARM SUB ASSY

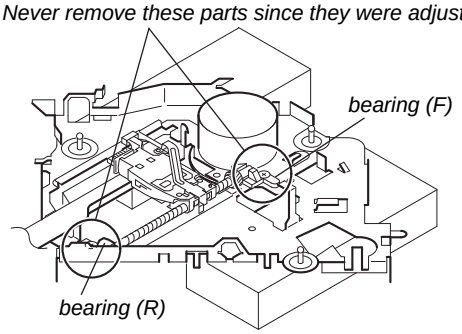

❸ chucking arm sub assy
❶ spring
❷
Note: Have this portion receive the chassis.
Note: Have this portion receive the chassis.
Note: Be careful not to touch the turn table.

3-9. SLED MOTOR ASSY

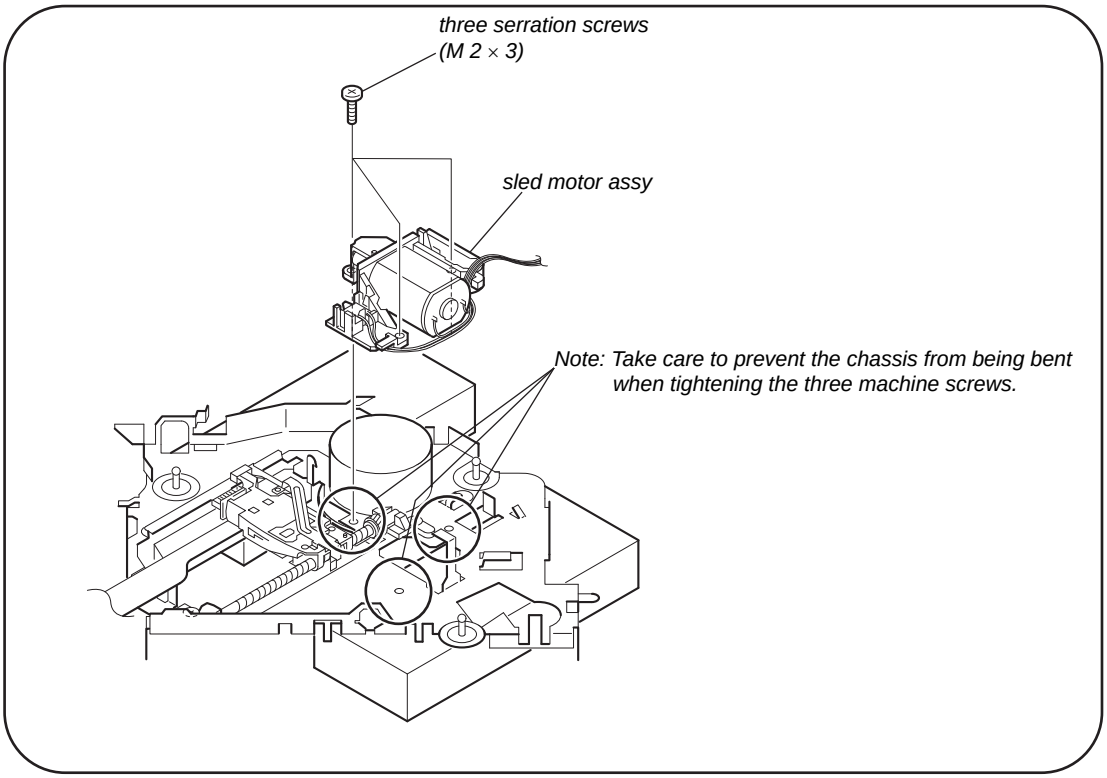


Note: Place the stand with care not to touch the turn table.

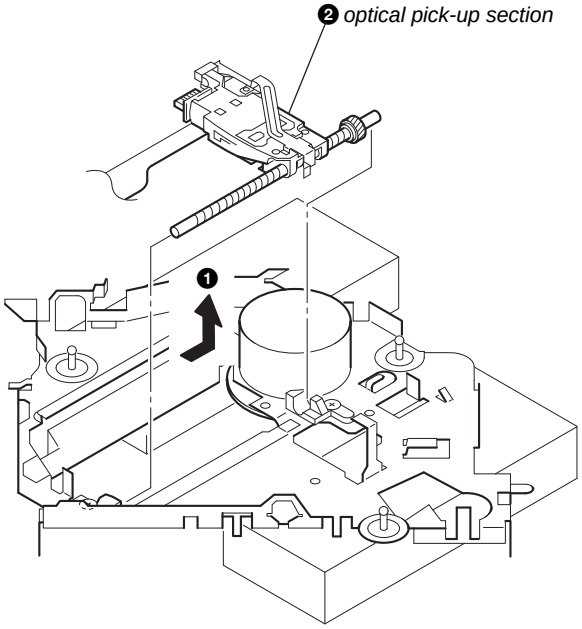
Note:
Never remove these parts since they were adjusted.

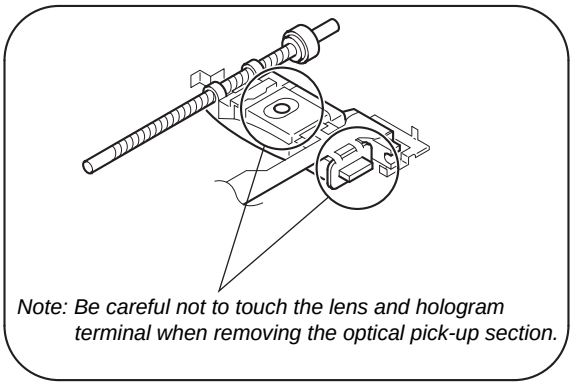


Note for Assembly


three serration screws
(M 2 × 3)
sled motor assy
Note: Take care to prevent the chassis from being bent
when tightening the three machine screws.

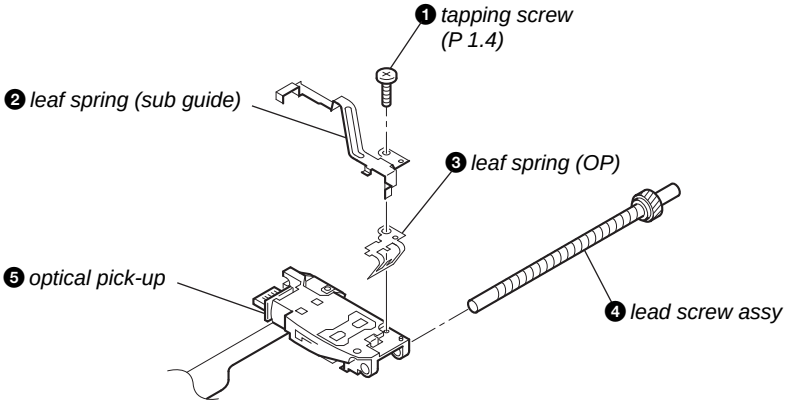
3-10. OPTICAL PICK-UP SECTION



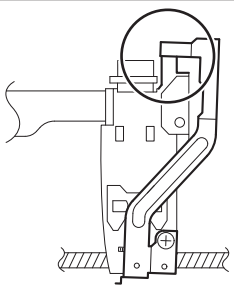


Note: Be careful not to touch the lens and hologram terminal when removing the optical pick-up section.

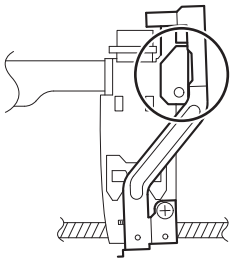
3-11. OPTICAL PICK-UP



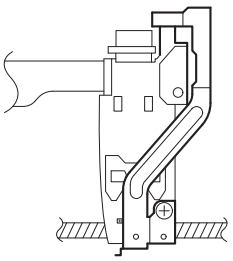
Notes for Assembly



Prevent the end of the leaf spring (sub guide) from being in contact with the OP slide base.



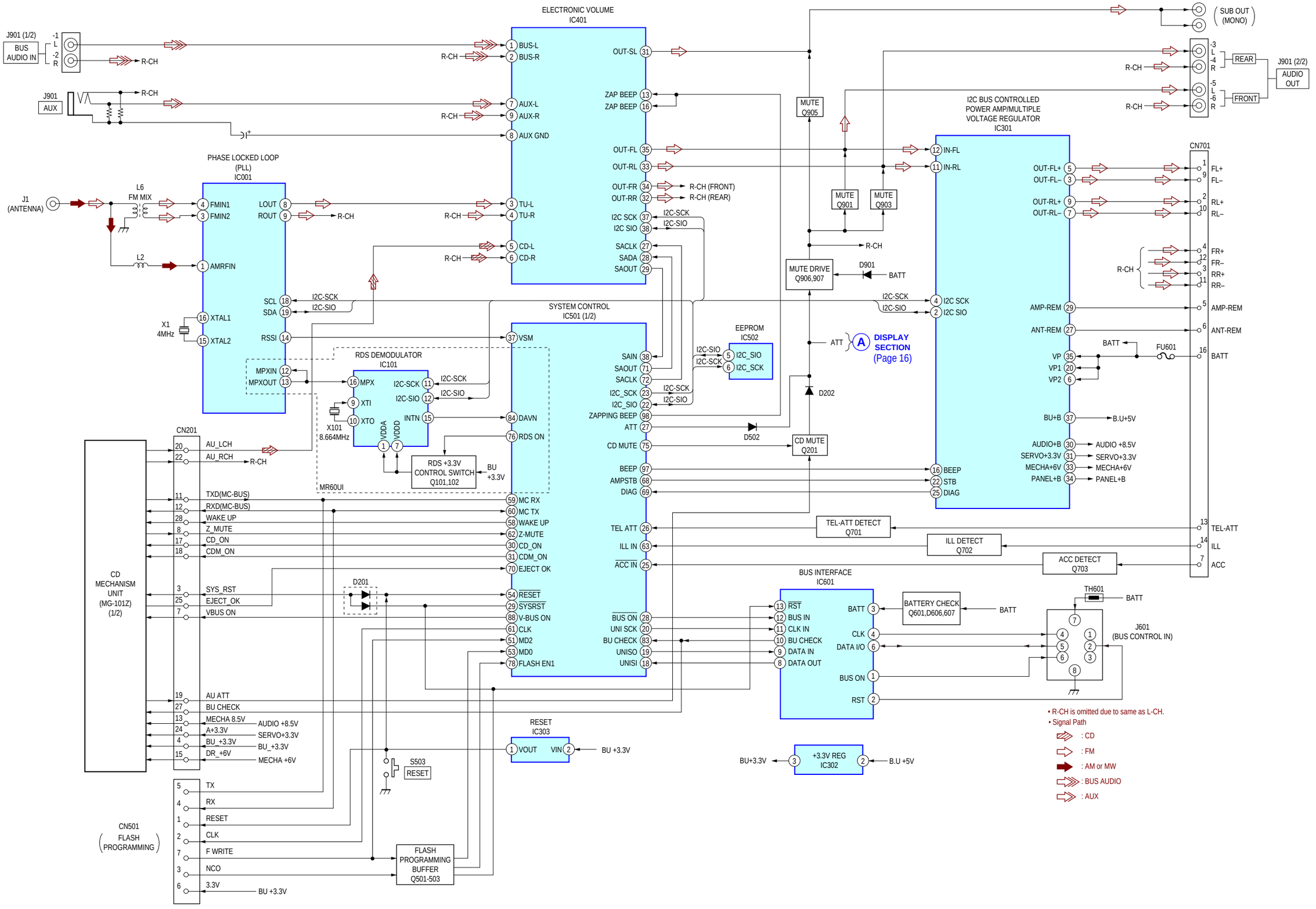
Prevent the end of the leaf spring (sub guide) from being in contact with the OP slide base.



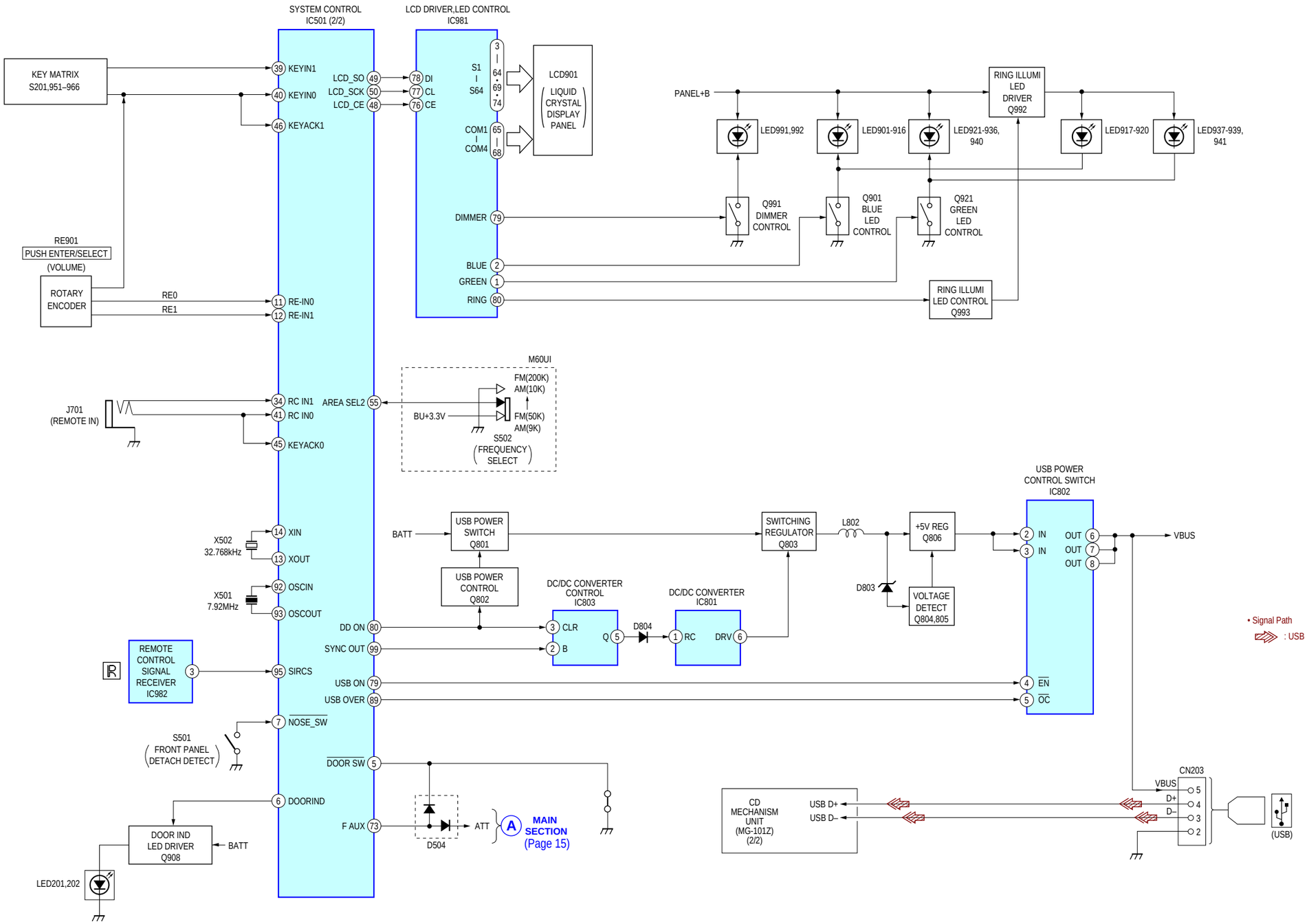
There is space at the end of the leaf spring (sub guide) to avoid contact with the slide.

SECTION 4
DIAGRAMS

4-1. BLOCK DIAGRAM – MAIN Section –



4-2. BLOCK DIAGRAM – DISPLAY Section –



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS. (In addition to this, the necessary note is printed in each block.)

For Printed Wiring Boards:

Note:

- ○——: Parts extracted from the component side.
- ——: parts extracted from the conductor side.
- ○ : Through hole.
- ▭ : Pattern from the side which enables seeing. (The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (SIDE B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (SIDE A)	Parts on the parts face side seen from the parts face are indicated.

For schematic diagrams:

Note:

- All capacitors are in µF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- ▬▬: B+ Line.
- ▬ ▬ ▬: B– Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM
  ( ): AM or MW
  < >: CD PLAY
- Voltages are taken with VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  : CD
  : FM
  : AM or MW
  : AUX
  : USB
  : BUS AUDIO

- **Waveforms**

– MAIN Board –

① IC001 ⑯ (XTAL1)

4 MHz

0.05 V/DIV, 50 nsec/DIV

② IC501 ⑬ (X_OUT)

32.768 kHz

0.5 V/DIV, 20 µsec/DIV

③ IC501 ㊾ (OSC_OUT)

7.92 MHz

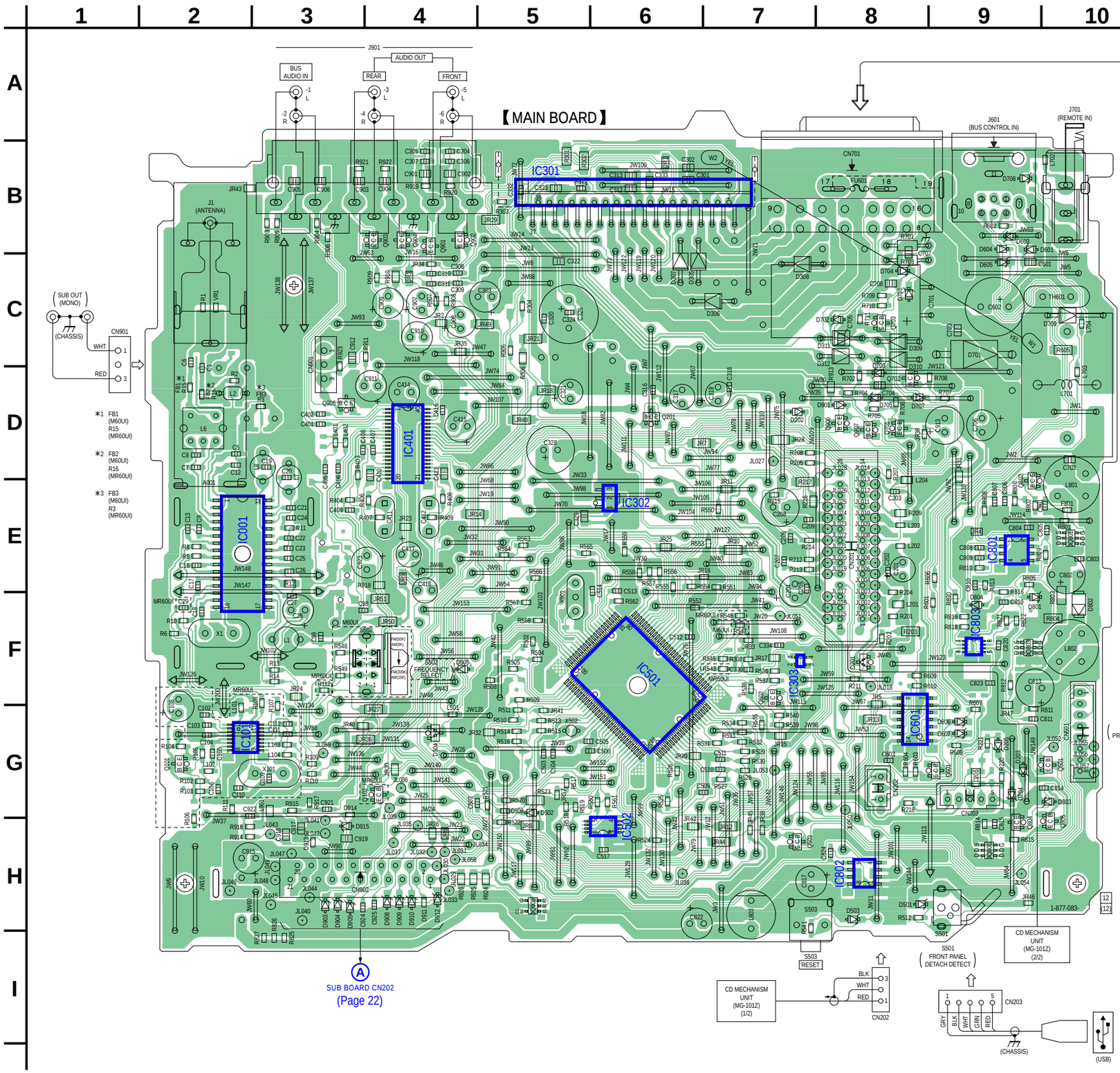
0.5 V/DIV, 50 nsec/DIV

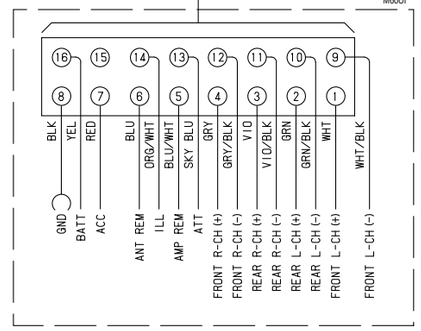
④ IC101 ⑨ (XT1)
(CDX-MR60UI only)

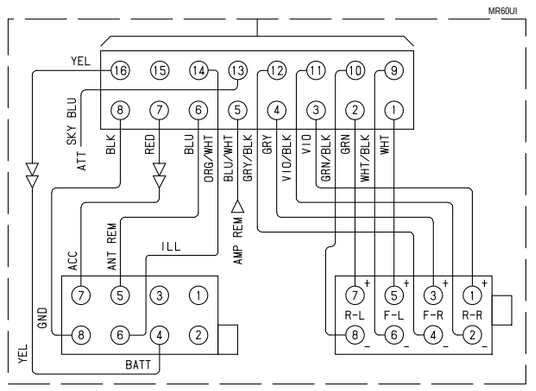
8.664 MHz

0.5 V/DIV, 50 nsec/DIV

4-3. PRINTED WIRING BOARD – MAIN Section – • : Uses unleaded solder.





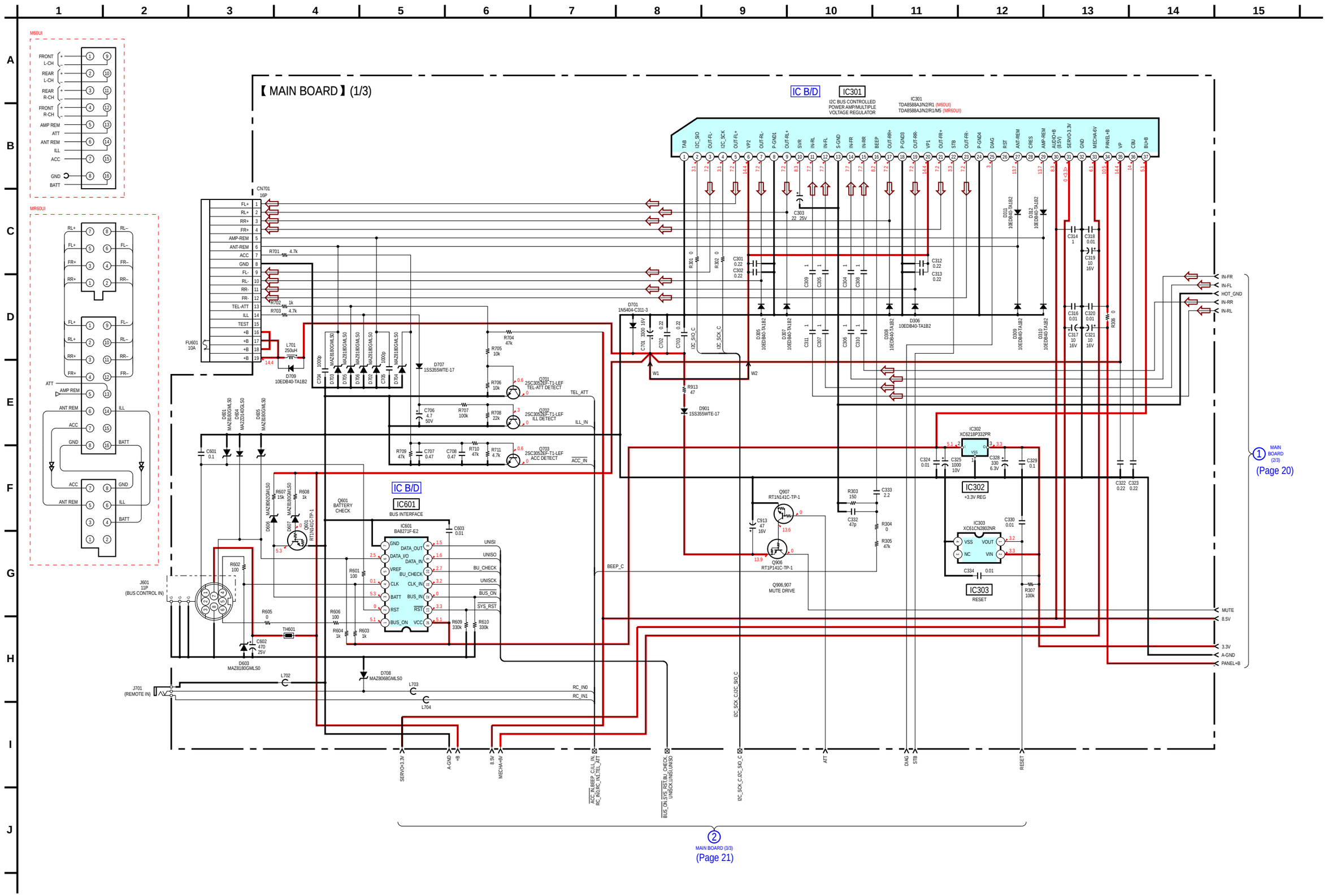


- **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D201	F-8	D707	D-8	IC802	H-8
D202	D-7	D708	B-9	IC803	F-9
D203	G-9	D709	C-10		
D204	G-9	D801	F-9	(Q101)	G-2
D205	G-9	D802	F-10	(Q102)	G-4
D305	C-6	D803	G-10	Q201	D-6
D306	C-7	D804	F-9	Q501	G-10
D307	C-6	D901	D-8	Q502	F-7
D308	C-7	D903	H-3	Q503	H-7
D309	C-8	D904	H-3	Q601	G-9
D310	C-8	D905	H-3	Q701	D-8
D311	C-8	D908	H-4	Q702	D-8
D312	C-8	D909	H-4	Q703	C-8
D501	H-8	D910	H-4	Q801	E-10
D502	G-5	D911	H-4	Q802	E-9
D503	H-8	D912	H-4	Q803	F-9
D504	G-4	D913	H-3	Q804	H-9
D505	F-4	D914	G-3	Q805	H-10
D601	B-9	D915	H-3	Q806	H-9
D603	B-9			Q901	B-4
D604	B-9	IC001	E-2	Q902	B-4
D605	C-9	(IC101)	G-2	Q903	B-4
D606	G-9	IC301	B-5	Q904	B-4
D607	G-9	IC302	E-6	Q905	D-3
D701	C-9	IC303	F-7	Q906	D-8
D702	C-8	IC401	D-4	Q907	D-8
D703	D-8	IC501	F-6	Q908	H-5
D704	C-8	IC502	H-6		
D705	D-8	IC601	G-8	VR1	C-2
D706	C-8	IC801	E-9		

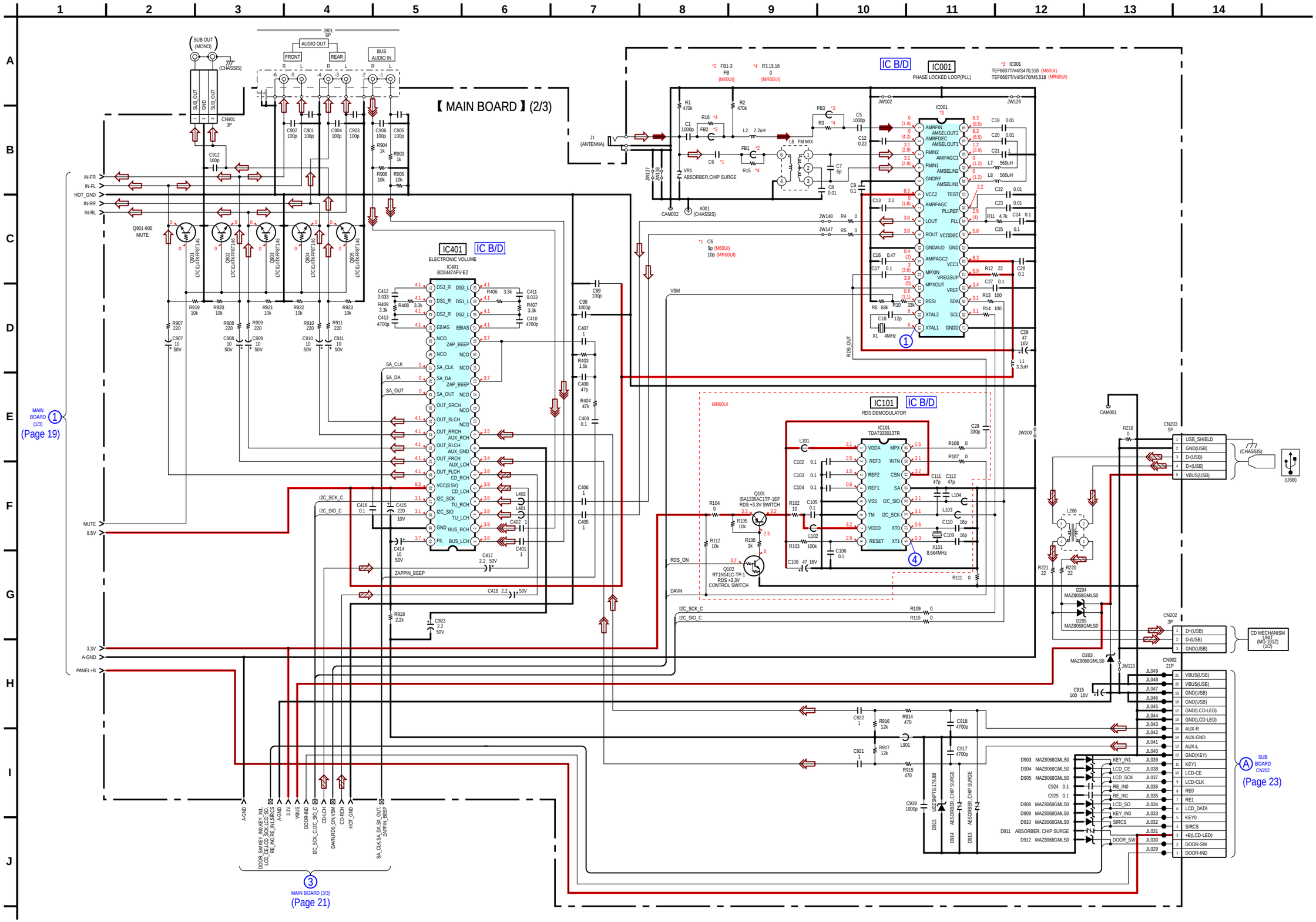
( ): CDX-MR60UI only

4-4. SCHEMATIC DIAGRAM – MAIN Section (1/3) – • See page 26 for IC Block Diagrams.



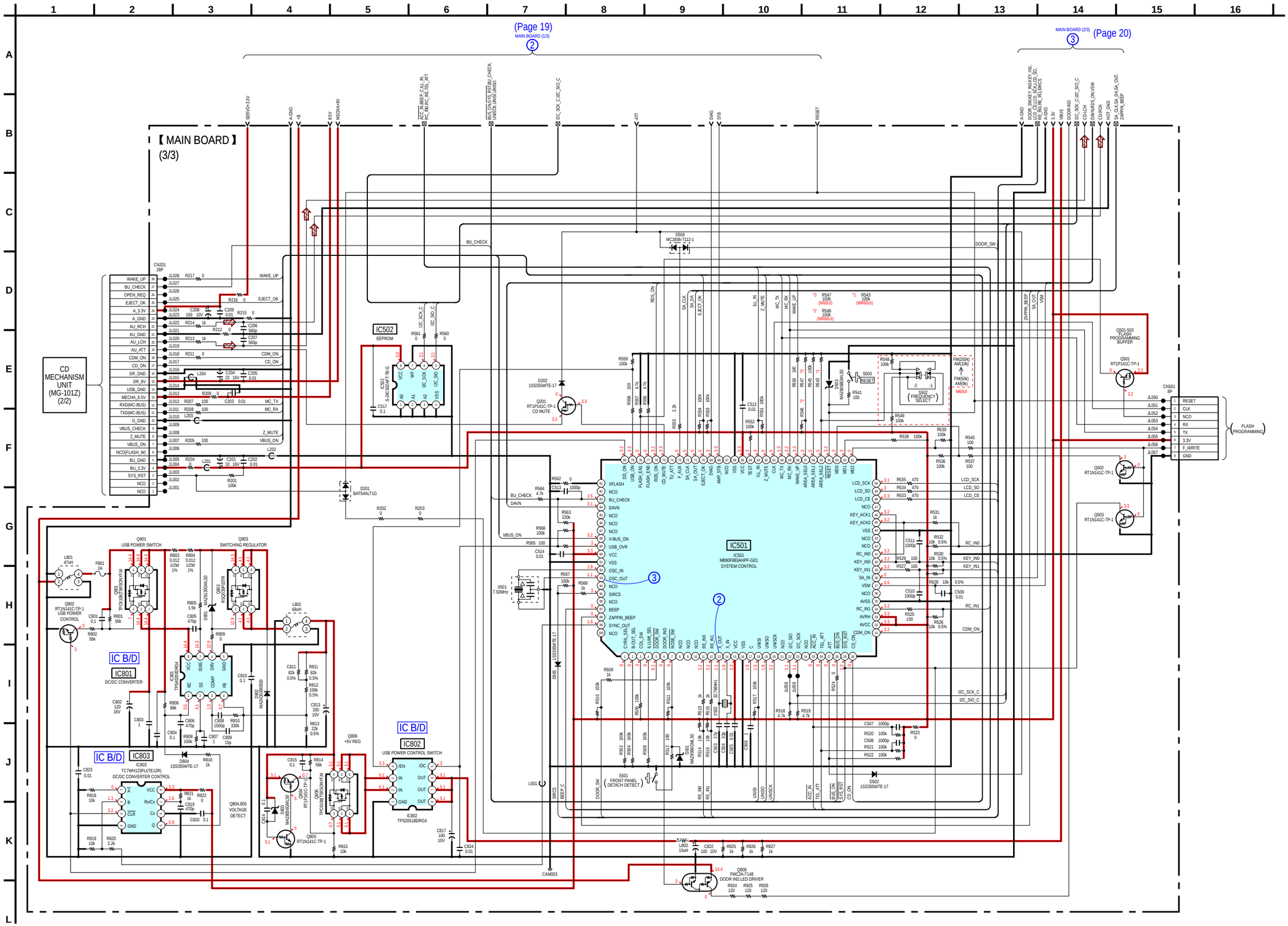
4-5. SCHEMATIC DIAGRAM – MAIN Section (2/3) –

• See page 17 for Waveforms. • See page 26 for IC Block Diagrams.

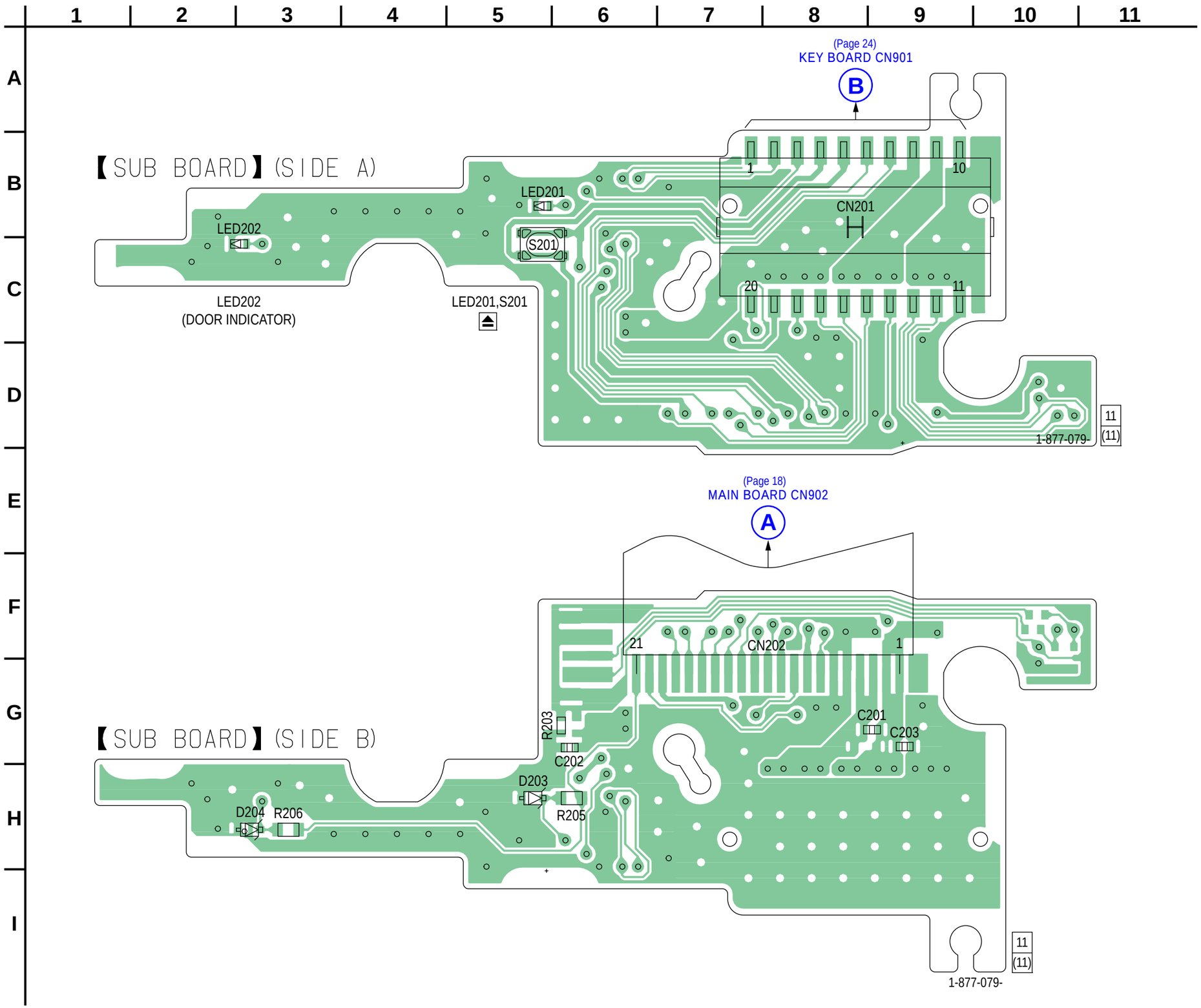


4-6. SCHEMATIC DIAGRAM – MAIN Section (3/3) –

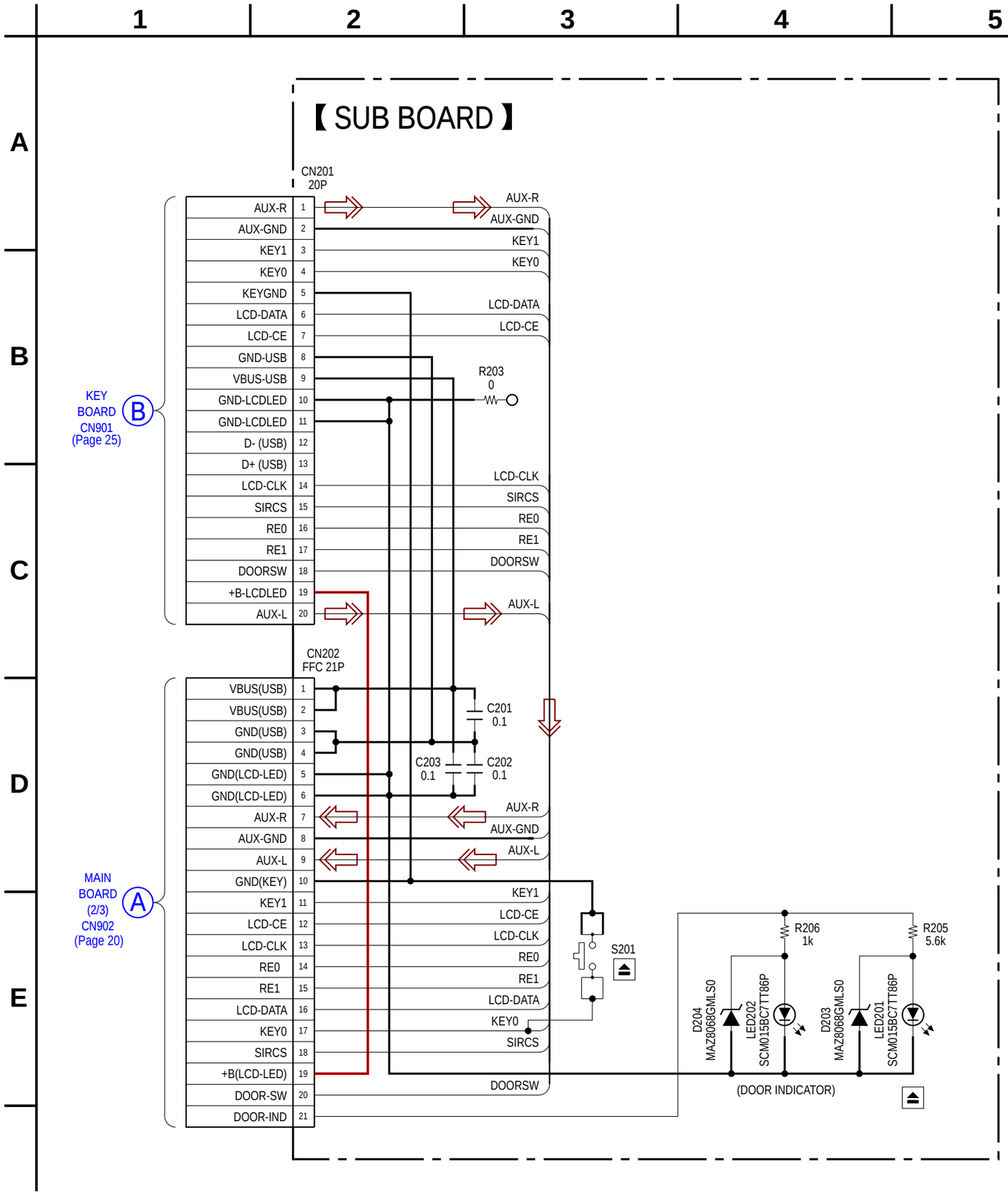
• See page 17 for Waveforms. • See page 28 for IC Block Diagrams. • See page 29 for IC Pin Function Description.



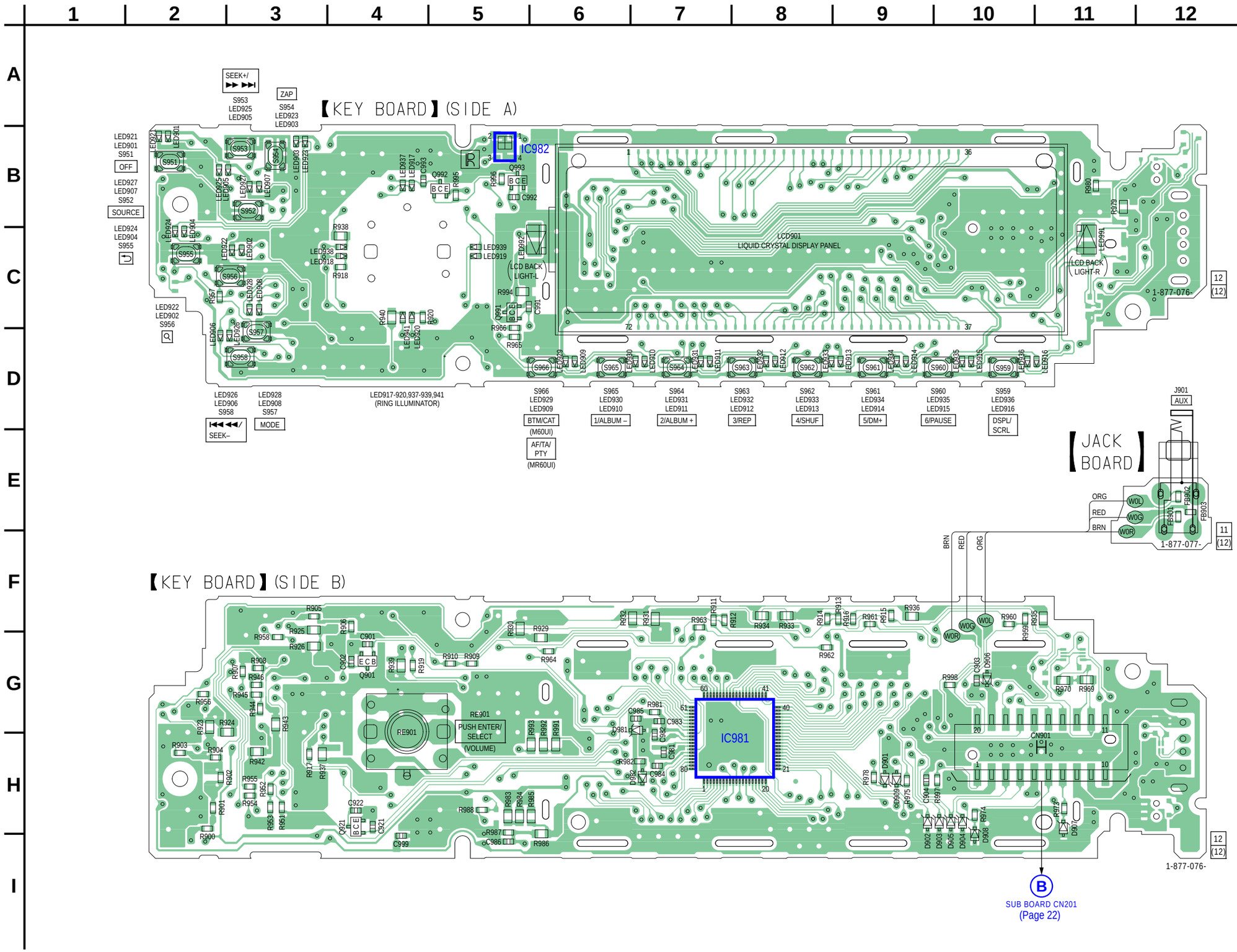
4-7. PRINTED WIRING BOARD – SUB Section – • : Uses unleaded solder.



4-8. SCHEMATIC DIAGRAM – SUB Section –



4-9. PRINTED WIRING BOARDS – KEY Section – • : Uses unleaded solder.



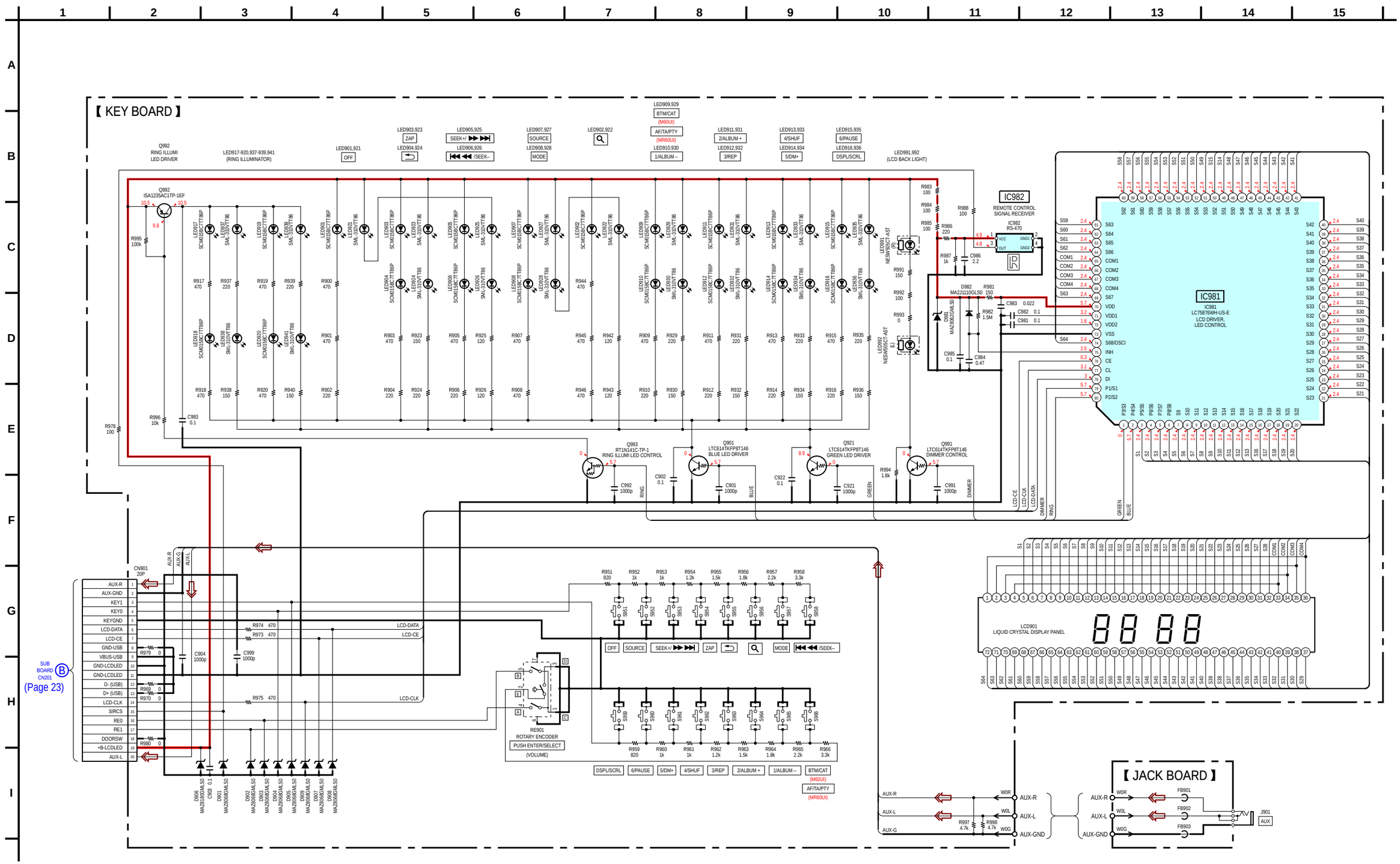
• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
(D901)	H-9	LED918	C-4
(D902)	I-9	LED919	C-5
(D903)	I-10	LED920	D-4
(D904)	I-10	LED921	B-2
(D905)	I-10	LED922	C-3
(D906)	G-10	LED923	B-3
(D907)	H-11	LED924	C-2
(D908)	I-10	LED925	B-2
(D909)	H-9	LED926	D-3
(D981)	G-7	LED927	B-3
(D982)	H-7	LED928	C-3
		LED929	D-6
(IC981)	H-8	LED930	D-7
IC982	B-5	LED931	D-7
		LED932	D-8
LED901	B-2	LED933	D-8
LED902	C-3	LED934	D-9
LED903	B-3	LED935	D-10
LED904	C-2	LED936	D-10
LED905	B-3	LED937	B-4
LED906	D-2	LED938	C-4
LED907	B-3	LED939	C-5
LED908	C-3	LED941	D-4
LED909	D-6	LED991	C-11
LED910	D-7	LED992	C-6
LED911	D-7		
LED912	D-8	(Q901)	G-4
LED913	D-9	(Q921)	H-4
LED914	D-9	Q991	C-5
LED915	D-10	Q992	B-5
LED916	D-11	Q993	B-5
LED917	B-4		

( ): SIDE B

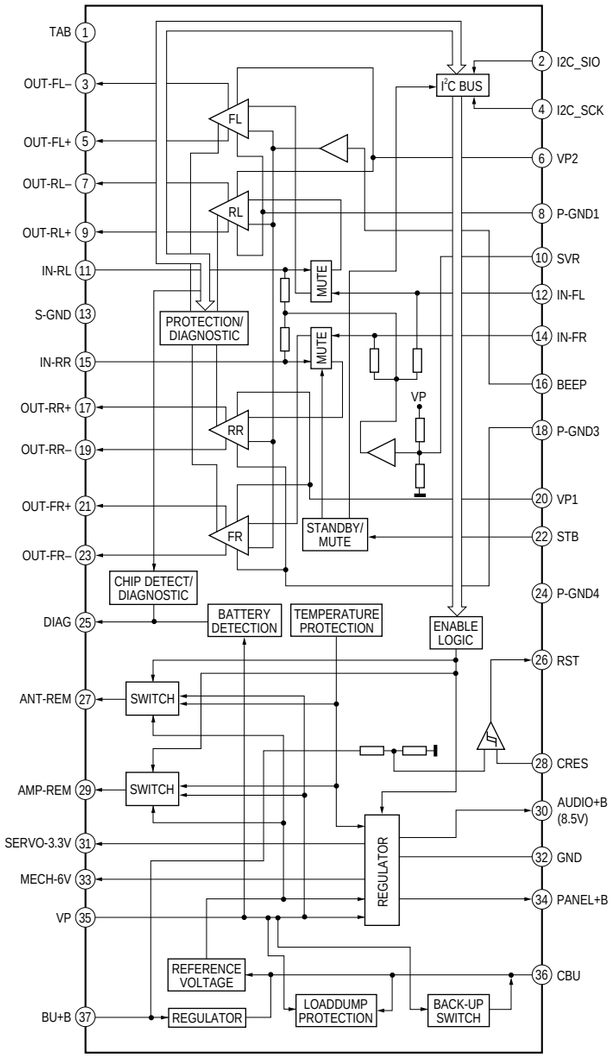
4-10. SCHEMATIC DIAGRAM – KEY Section –

• See page 28 for IC Block Diagrams.

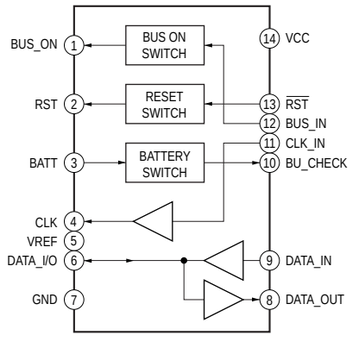


- **IC Block Diagrams**

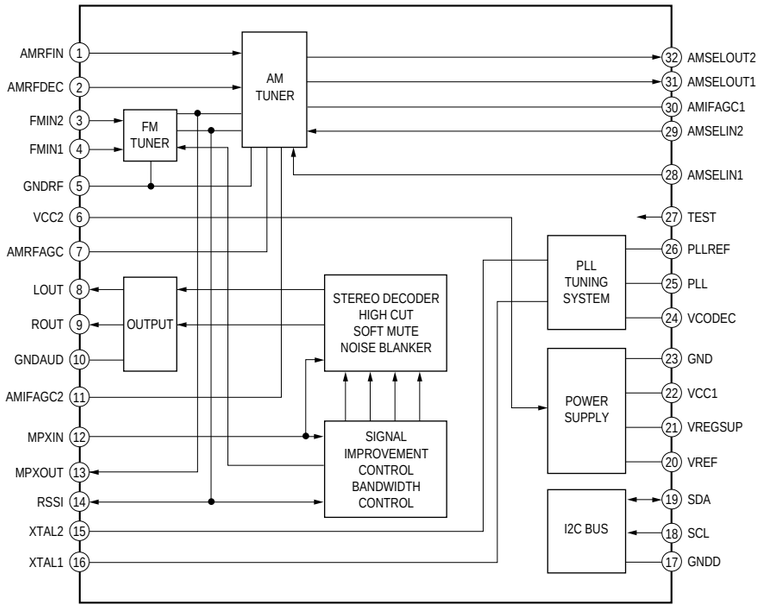
IC301 TDA8588AJ/N2/R1 (CDX-M60UI) (MAIN Board (1/3))
IC301 TDA8588AJ/N2/R1/M5 (CDX-MR60UI) (MAIN Board (1/3))



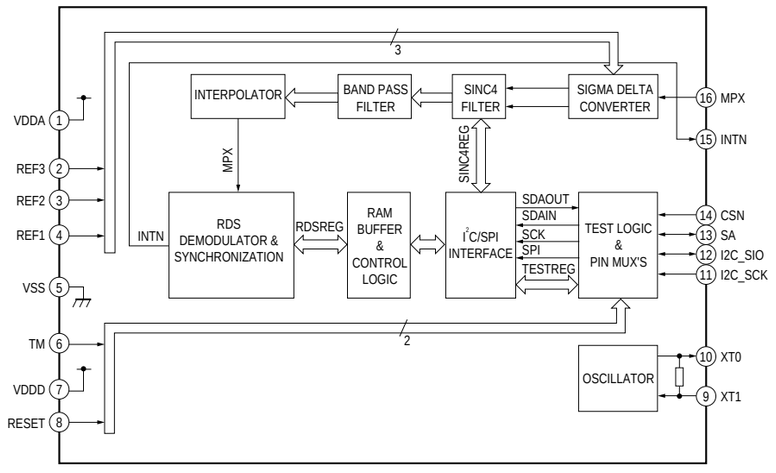
IC601 BA8271F-E2 (MAIN Board (1/3))



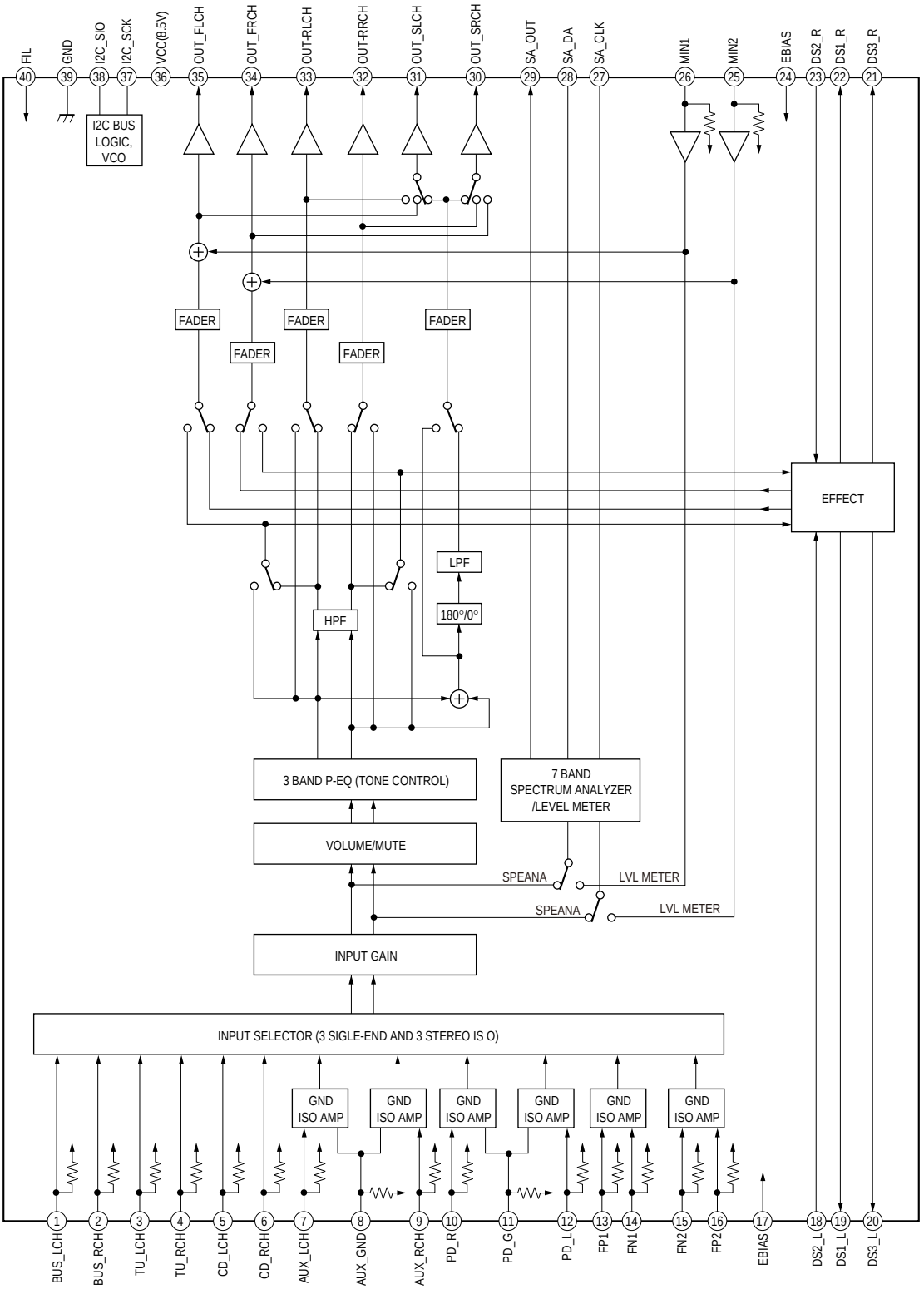
IC001 TEF6607T/V4/S470,518 (CDX-M60UI) (MAIN Board (2/3))
IC001 TEF6607T/V4/S470/M5,518 (CDX-MR60UI) (MAIN Board (2/3))



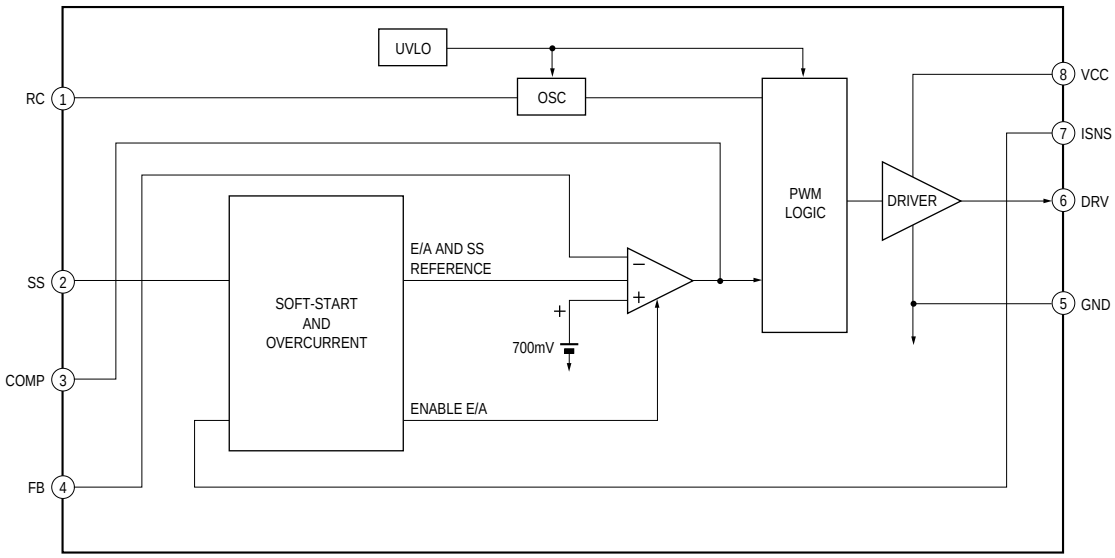
IC101 TDA7333013TR (CDX-MR60UI) (MAIN Board (2/3))



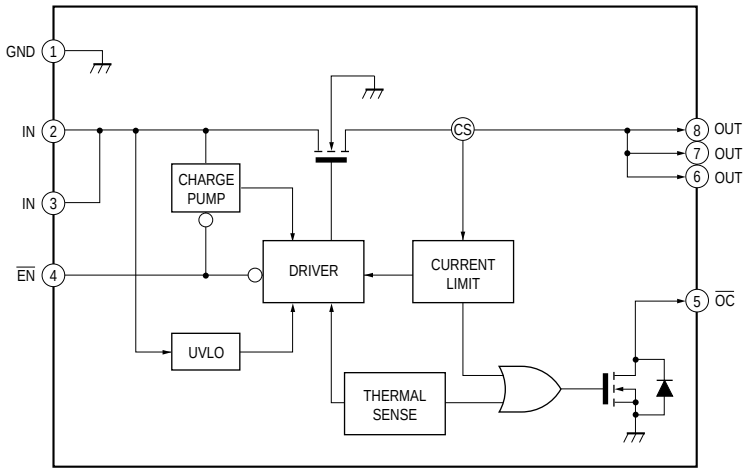
IC401 BD3447AFV-E2 (MAIN Board (2/3))



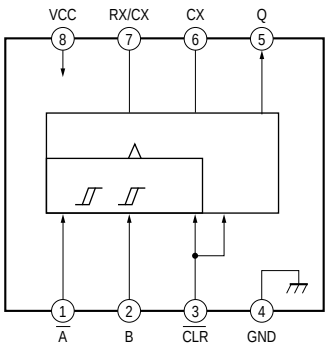
IC801 TPS40200DRG4 (MAIN Board (3/3))



IC802 TPS2051BDRG4 (MAIN Board (3/3))



IC803 TC7WH123FU(TE12R) (MAIN Board (3/3))



• **IC Pin Function Description**

MAIN BOARD (3/3) IC501 MB90F883AHPF-GE1 (SYSTEM CONTROL)

Pin No.	Pin Name	I/O	Description
1	CYRIL_SEL	I	Cyril select signal input (L: No cyril select)
2	B-OUT_SEL	I	Black out setting signal input (L: No black out)
3	COL_SW	I	Key illumination initial color setting signal input (H: Blue)
4	ILLUMI_SEL	I	Key illumination voltage setting signal input (L: 9 V)
5	$\overline{\text{DOOR\_SW}}$	I	Front panel open detect signal input
6	DOOR_IND	O	Door indicator control signal output
7	$\overline{\text{NOSE\_SW}}$	I	Front panel detach detect signal input
8 to 10	NCO	O	Not used. (Open)
11	RE_IN0	I	Rotary encoder signal input 0
12	RE_IN1	I	Rotary encoder signal input 1
13	X_OUT	O	Low speed operation clock signal output (32.768 kHz)
14	X_IN	I	Low speed operation clock signal input (32.768 kHz)
15	VCC	–	Power supply pin (+3.3 V)
16	VSS	–	Ground
17	C	–	Regulator reference capacitor connecting pin
18	UNISI	I	SONY-BUS data input
19	UNISO	O	SONY-BUS data output
20	UNISCK	O	SONY-BUS clock signal output
21	NCO	O	Not used. (Open)
22	I2C_SIO	I/O	I2C serial data input/output
23	I2C_SCK	O	I2C serial clock signal output
24	NCO	O	Not used. (Open)
25	$\overline{\text{ACC\_IN}}$	I	Accessory power supply detect signal input
26	TEL_ATT	I	Telephone attenuator detect signal input
27	ATT	O	Audio mute control signal output
28	$\overline{\text{BUS\_ON}}$	O	BUS ON signal output
29	$\overline{\text{SYS\_RST}}$	O	System reset signal output
30	CD_ON	I	CD mechanism servo power supply control request signal input
31	CDM_ON	I	CD mechanism deck power supply control request signal input
32	AVCC	–	A/D converter power supply pin (+3.3 V)
33	AVRH	–	A/D converter external reference power supply pin (+3.3 V)
34	RC_IN1	I	Rotary commander shift key signal input 1
35	AVSS	–	Ground for A/D converter
36	NCO	O	Not used. (Open)
37	VSM	I	S meter voltage detect signal input
38	SA_IN	I	Spectrum analyzer DC input
39	KEY_IN1	I	Key signal input 1
40	KEY_IN0	I	Key signal input 0
41	RC_IN0	I	Rotary commander shift key signal input 0
42, 43	NCO	O	Not used. (Open)
44	VSS	–	Ground
45	KEY_ACK0	I	Key acknowledge detect signal input (Rotary commander)
46	KEY_ACK1	I	Key acknowledge detect signal input (Front panel)
47	NCO	O	Not used. (Open)
48	LCD_CE	O	LCD driver chip enable signal output
49	LCD_SO	O	LCD driver serial data output
50	LCD_SCK	O	LCD driver serial clock signal output
51	MOD2	I	Micon operation mode setting signal input (active: L)
52	MOD1	I	Micon operation mode setting signal input
53	MOD0	I	Micon operation mode setting signal input (active: H)
54	$\overline{\text{RESET}}$	I	Reset signal input
55	AREA_SEL2	I	Destination setting pin 2 (L: CDX-M60UI/MR60UI, H: CDX-M60UI)
56	AREA_SEL1	I	Destination setting pin 1 (Fixed at L)
57	AREA_SEL0	I	Destination setting pin 0 (L: CDX-M60UI, H: CDX-MR60UI)

Pin No.	Pin Name	I/O	Description
58	WAKE_UP	O	CD mechanism deck micon wake up signal output
59	MC_RX	I	MC-BUS communication and CD mechanism deck micon communication RX input
60	MC_TX	O	MC-BUS communication and CD mechanism deck micon communication TX output
61	CLK	O	Flash programming serial clock signal output
62	Z_MUTE	I	Z mute signal input
63	ILL_IN	I	Key illumination signal input
64	TEST	I	Test mode detect signal input
65	VCC	–	Power supply pin (+3.3 V)
66	VSS	–	Ground
67	NCO	O	Not used. (Open)
68	AMP_STB	O	Standby signal output for power regulator IC
69	DIAG	I	Condition signal input from power amp IC
70	EJECT_OK	O	Eject OK signal output
71	SA_OUT	O	Spectrum analyzer serial data output
72	SA_CLK	O	Spectrum analyzer serial clock signal output
73	F_AUX	O	Front AUX mute signal output
74	TU_ATT	O	Not used in this set. (Open)
75	CD_MUTE	O	CD mute signal outout
76	RDS_ON	O	RDS IC power supply control signal output (CDX-MR60UI)
77	FLASH_EN0	I	Flash writer programming wake up signal input (Fixed at L)
78	FLASH_EN1	I	Flash writer programming wake up signal input
79	USB_ON	O	USB over current detect IC control signal output
80	DD_ON	O	DC/DC converter power supply ON/OFF control signal output
81	XFLASH	I	Not used in this set. (Fixed at L)
82	NCO	O	Not used. (Open)
83	BU_CHECK	I	Back up power supply detect signal input
84	DAVN	I	RDS data block sync detect signal input (CDX-MR60UI)
85 to 87	NCO	O	Not used. (Open)
88	V-BUS_ON	I	VBUS power supply control signal input (L: VBUS OFF, H: VBUS ON)
89	USB_OVR	I	USB over current detect signal input
90	VCC	–	Power supply pin (+3.3 V)
91	VSS	–	Ground
92	OSC_IN	I	High speed operation clock signal input (7.92 MHz)
93	OSC_OUT	O	High speed operation clock signal output (7.92 MHz)
94	NCO	O	Not used. (Open)
95	SIRCS	I	Remote control signal input
96	NCO	O	Not used. (Open)
97	BEEP	O	Beep signal output for power amplifier IC
98	ZAPPIN_BEEP	O	Zappin beep signal output
99	SYNC_OUT	O	DC/DC converter oscillation frequency control signal output
100	NCO	O	Not used. (Open)

SECTION 5
EXPLODED VIEWS

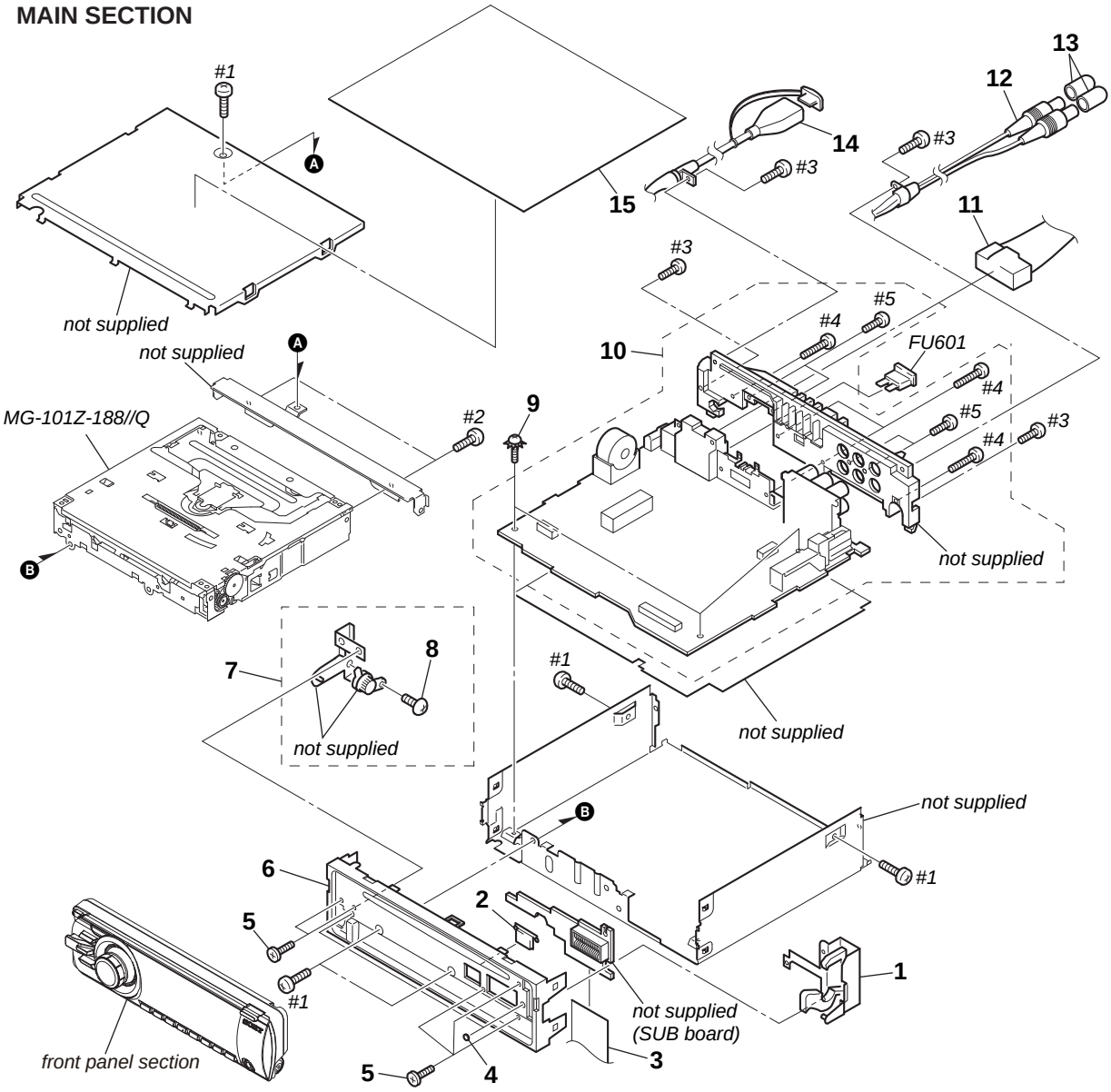
Note:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Accessories are given in the last of the electrical parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

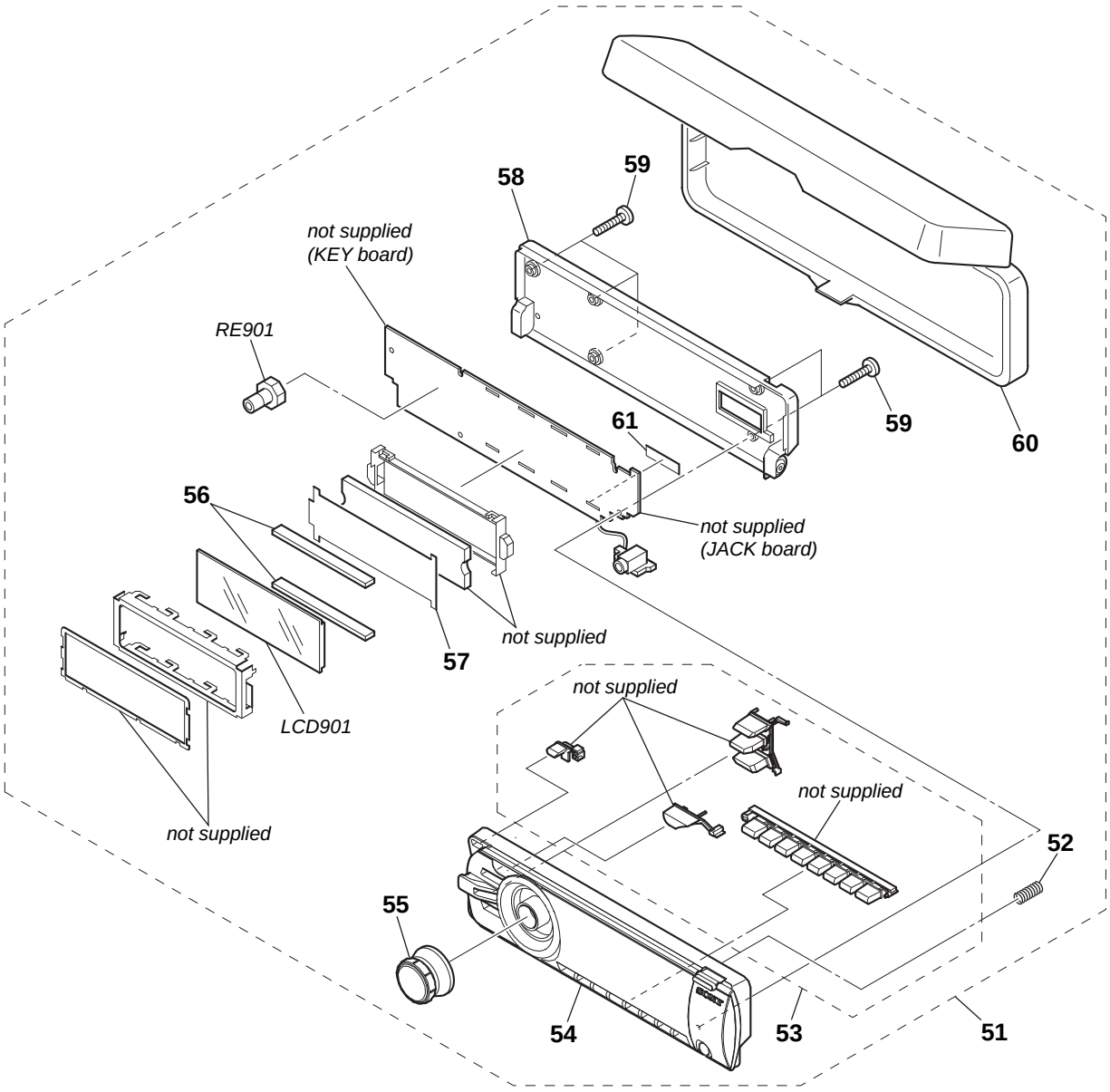
5-1. MAIN SECTION



Ref. No.	Part No.	Description	Remark
1	X-2176-199-1	LOCK ASSY	
2	3-246-441-01	BUTTON (EJECT)	
3	1-835-781-11	CABLE, FLEXIBLE FLAT (21 CORE)	
4	3-260-247-01	CUSHION (SUB PANEL)	
5	3-042-244-01	SCREW (T)	
6	X-2319-346-1	PANEL ASSY, SUB	
7	X-3384-203-2	GEAR ASSY	
8	3-713-786-51	SCREW +P 2X3	
9	3-376-464-11	SCREW (+PTT 2.6X6), GROUND POINT	
10	A-1609-298-A	MAIN BOARD, COMPLETE (M60UI)	
10	A-1609-320-A	MAIN BOARD, COMPLETE (MR60UI)	
11	1-776-527-71	CORD (WITH CONNECTOR) (ISO) (POWER)	(MR60UI)

Ref. No.	Part No.	Description	Remark
11	1-833-972-11	CONNECTION CORD FOR AUTOMOBILE (POWER)	(M60UI)
12	1-833-887-11	CONNECTION CORD (RCA) (SUB OUT (MONO))	
13	3-264-798-01	CAP	
14	1-836-199-11	CONNECTION CORD FOR AUTOMOBILE (USB)	
15	2-590-307-03	SHEET, COVER	
FU601	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A	
#1	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#2	7-685-790-01	SCREW +PTT 2.6X4 (S)	
#3	7-685-793-09	SCREW +PTT 2.6X8 (S)	
#4	7-685-794-09	SCREW +PTT 2.6X10 (S)	
#5	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT	

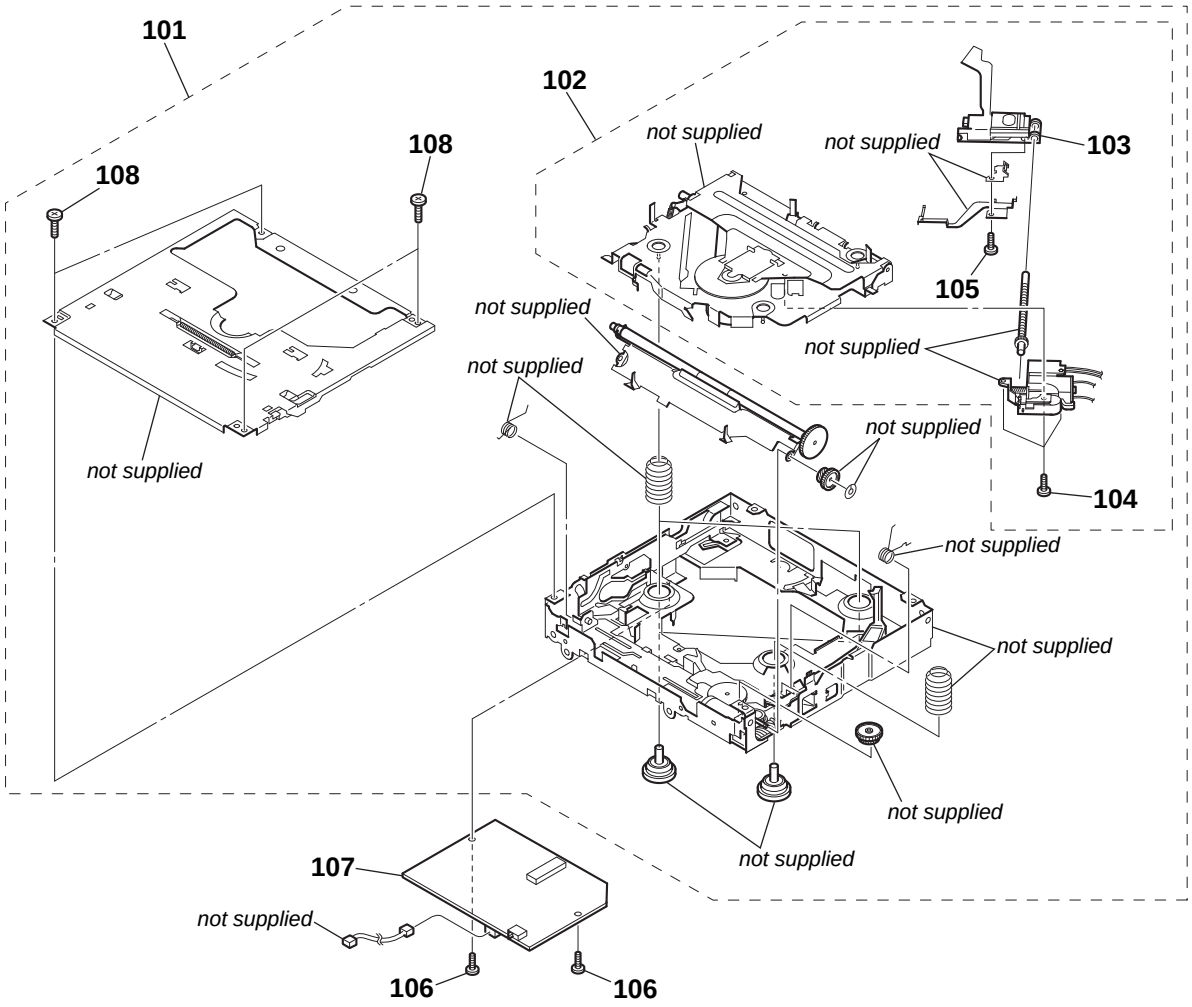
5-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	A-1609-300-A	PANEL OVERALL ASSY, FRONT (M60UI)	
51	A-1609-322-A	PANEL OVERALL ASSY, FRONT (MR60UI)	
52	3-264-712-01	SPRING (OPEN)	
53	X-2342-646-1	BUTTON ASSY (S) (M60UI)	
53	X-2342-647-1	BUTTON ASSY (S) (MR60UI)	
54	X-2342-644-1	PANEL (SV) ASSY, FRONT (M60UI)	
54	X-2342-645-1	PANEL (SV) ASSY, FRONT (MR60UI)	
55	X-2320-325-1	KNOB ASSY (S)	
56	1-780-433-11	CONDUCTIVE BOARD, CONNECTION	

Ref. No.	Part No.	Description	Remark
57	3-874-328-13	ILLUMINATOR (LCD)	
58	X-2342-648-1	PANEL (SV) ASSY, BACK	
59	3-250-543-71	SCREW (+B P-TITE M2)	
60	X-2187-544-1	CASE ASSY (for FRONT PANEL)	
61	3-229-100-01	SHEET (SW), ADHESIVE	
LCD901	1-802-847-11	DISPLAY PANEL, LIQUID CRYSTAL	
RE901	1-487-023-11	ENCODER, ROTARY (PUSH ENTER/SELECT (VOLUME))	

5-3. CD MECHANISM SECTION (MG-101Z-188//Q)



Ref. No.	Part No.	Description	Remark
101	A-1313-179-A	MECHANICAL BLOCK (U) ASSY (08)	
102	A-1284-705-A	DAXEV08//Q	
⚠ 103	X-2149-672-1	SERVICE ASSY, OP (DAX-25A)	
104	2-626-869-31	SCREW (M2X3), SERRATION	
105	3-686-458-21	SCREW (P1.4), TAPPING	
106	3-352-758-31	SCREW (M1.7X2.5), TOOTHED LOCK	
107	A-1554-409-A	SERVO BOARD, COMPLETE	
108	2-134-636-71	SCREW (M1.7X2.5)	

JACK KEY

SECTION 6
ELECTRICAL PARTS LIST

Note:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS
  uF: μF
- COILS
  uH: μH
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA. . : μA. . , uPA. . , μPA. . ,
  uPB. . : μPB. . , uPC. . , μPC. . ,
  uPD. . : μPD. .

When indicating parts by reference number, please include the board.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
		JACK BOARD			
		**********			
		< FERRITE BEAD >			
FB901	1-414-760-21	INDUCTOR, FERRITE BEAD			
FB902	1-414-760-21	INDUCTOR, FERRITE BEAD			
FB903	1-414-760-21	INDUCTOR, FERRITE BEAD			
		< JACK >			
J901	1-821-687-11	JACK, 3.5 SMALL TYPE (AUX)			
**********					
		KEY BOARD			
		**********			
	1-780-433-11	CONDUCTIVE BOARD, CONNECTION			
	3-229-100-01	SHEET (SW), ADHESIVE			
	3-874-328-13	ILLUMINATOR (LCD)			
		< CAPACITOR >			
C901	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C902	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C903	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C904	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C921	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C922	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C981	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C982	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C983	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C984	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C985	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C986	1-135-834-11	CERAMIC CHIP	2.2uF		6.3V
C991	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C992	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C993	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C999	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
		< CONNECTOR >			
CN901	1-818-141-11	PLUG, CONNECTOR 20P			
		< DIODE >			
D901	6-501-743-01	DIODE MAZ8068GMLS0			
D902	6-501-743-01	DIODE MAZ8068GMLS0			
D903	6-501-743-01	DIODE MAZ8068GMLS0			
D904	6-501-743-01	DIODE MAZ8068GMLS0			
D905	6-501-743-01	DIODE MAZ8068GMLS0			

Ref. No.	Part No.	Description	Remark
D906	6-501-782-01	DIODE MAZ8180GMLS0	
D907	6-501-743-01	DIODE MAZ8068GMLS0	
D908	6-501-743-01	DIODE MAZ8068GMLS0	
D909	6-501-743-01	DIODE MAZ8068GMLS0	
D981	6-501-738-01	DIODE MAZ8062GMLS0	
D982	6-501-817-01	DIODE MA2J1110GLS0	
		< IC >	
IC981	6-707-064-01	IC LC75876WH-US-E	
IC982	6-600-629-01	IC RS-470 (IR)	
		< LIQUID CRYSTAL DISPLAY >	
LCD901	1-802-847-11	DISPLAY PANEL, LIQUID CRYSTAL	
		< DIODE >	
LED901	6-502-542-01	LED SCM015BC7TT86P (OFF)	
LED902	6-502-542-01	LED SCM015BC7TT86P (🔍 (BROWSE))	
LED903	6-502-542-01	LED SCM015BC7TT86P (ZAP)	
LED904	6-502-542-01	LED SCM015BC7TT86P (⮌ (BACK))	
LED905	6-502-542-01	LED SCM015BC7TT86P (SEEK+/ ▶▶ ▶▶I)	
LED906	6-502-542-01	LED SCM015BC7TT86P (I◀◀ ◀◀ /SEEK–)	
LED907	6-502-542-01	LED SCM015BC7TT86P (SOURCE)	
LED908	6-502-542-01	LED SCM015BC7TT86P (MODE)	
LED909	6-502-542-01	LED SCM015BC7TT86P (BTM/CAT) (M60UI)	
LED909	6-502-542-01	LED SCM015BC7TT86P (AF/TA/PTY) (MR60UI)	
LED910	6-502-542-01	LED SCM015BC7TT86P (1/ALBUM –)	
LED911	6-502-542-01	LED SCM015BC7TT86P (2/ALBUM +)	
LED912	6-502-542-01	LED SCM015BC7TT86P (3/REP)	
LED913	6-502-542-01	LED SCM015BC7TT86P (4/SHUF)	
LED914	6-502-542-01	LED SCM015BC7TT86P (5/DM+)	
LED915	6-502-542-01	LED SCM015BC7TT86P (6/PAUSE)	
LED916	6-502-542-01	LED SCM015BC7TT86P (DSPL/SCRL)	
LED917	6-502-542-01	LED SCM015BC7TT86P (RING ILLUMINATOR)	
LED918	6-502-542-01	LED SCM015BC7TT86P (RING ILLUMINATOR)	
LED919	6-502-542-01	LED SCM015BC7TT86P (RING ILLUMINATOR)	
LED920	6-502-542-01	LED SCM015BC7TT86P (RING ILLUMINATOR)	
LED921	8-719-053-09	LED SML-310VTT86 (OFF)	
LED922	8-719-053-09	LED SML-310VTT86 (🔍 (BROWSE))	
LED923	8-719-053-09	LED SML-310VTT86 (ZAP)	
LED924	8-719-053-09	LED SML-310VTT86 (⮌ (BACK))	
LED925	8-719-053-09	LED SML-310VTT86 (SEEK+/ ▶▶ ▶▶I)	
LED926	8-719-053-09	LED SML-310VTT86 (I◀◀ ◀◀ /SEEK–)	
LED927	8-719-053-09	LED SML-310VTT86 (SOURCE)	
LED928	8-719-053-09	LED SML-310VTT86 (MODE)	
LED929	8-719-053-09	LED SML-310VTT86 (BTM/CAT) (M60UI)	

Ref. No.	Part No.	Description	Remark
LED929	8-719-053-09	LED SML-310VTT86 (AF/TA/PTY) (MR60UI)	
LED930	8-719-053-09	LED SML-310VTT86 (1/ALBUM –)	
LED931	8-719-053-09	LED SML-310VTT86 (2/ALBUM +)	
LED932	8-719-053-09	LED SML-310VTT86 (3/REP)	
LED933	8-719-053-09	LED SML-310VTT86 (4/SHUF)	
LED934	8-719-053-09	LED SML-310VTT86 (5/DM+)	
LED935	8-719-053-09	LED SML-310VTT86 (6/PAUSE)	
LED936	8-719-053-09	LED SML-310VTT86 (DSPL/SCRL)	
LED937	8-719-053-09	LED SML-310VTT86 (RING ILLUMINATOR)	
LED938	8-719-053-09	LED SML-310VTT86 (RING ILLUMINATOR)	
LED939	8-719-053-09	LED SML-310VTT86 (RING ILLUMINATOR)	
LED941	8-719-053-09	LED SML-310VTT86 (RING ILLUMINATOR)	
LED991	6-501-339-01	LED NESW505CT-AST (LCD BACK LIGHT-R)	
LED992	6-501-339-01	LED NESW505CT-AST (LCD BACK LIGHT-L)	
		< TRANSISTOR >	
Q901	6-551-856-01	TRANSISTOR LTC614TKFP8T146	
Q921	6-551-856-01	TRANSISTOR LTC614TKFP8T146	
Q991	6-551-856-01	TRANSISTOR LTC614TKFP8T146	
Q992	6-551-696-01	TRANSISTOR ISA1235AC1TP-1EF	
Q993	8-729-027-43	TRANSISTOR DTC114EKA-T146	
		< RESISTOR >	
R900	1-216-817-11	METAL CHIP 470 5%	1/10W
R901	1-216-817-11	METAL CHIP 470 5%	1/10W
R902	1-216-813-11	METAL CHIP 220 5%	1/10W
R903	1-216-817-11	METAL CHIP 470 5%	1/10W
R904	1-216-813-11	METAL CHIP 220 5%	1/10W
R905	1-216-817-11	METAL CHIP 470 5%	1/10W
R906	1-216-813-11	METAL CHIP 220 5%	1/10W
R907	1-216-817-11	METAL CHIP 470 5%	1/10W
R908	1-216-817-11	METAL CHIP 470 5%	1/10W
R909	1-216-817-11	METAL CHIP 470 5%	1/10W
R910	1-216-813-11	METAL CHIP 220 5%	1/10W
R911	1-216-817-11	METAL CHIP 470 5%	1/10W
R912	1-216-813-11	METAL CHIP 220 5%	1/10W
R913	1-216-817-11	METAL CHIP 470 5%	1/10W
R914	1-216-813-11	METAL CHIP 220 5%	1/10W
R915	1-216-817-11	METAL CHIP 470 5%	1/10W
R916	1-216-813-11	METAL CHIP 220 5%	1/10W
R917	1-216-817-11	METAL CHIP 470 5%	1/10W
R918	1-216-817-11	METAL CHIP 470 5%	1/10W
R919	1-216-817-11	METAL CHIP 470 5%	1/10W
R920	1-216-817-11	METAL CHIP 470 5%	1/10W
R923	1-216-029-00	METAL CHIP 150 5%	1/10W
R924	1-216-033-00	METAL CHIP 220 5%	1/10W
R925	1-216-027-00	METAL CHIP 120 5%	1/10W
R926	1-216-027-00	METAL CHIP 120 5%	1/10W
R929	1-216-033-00	METAL CHIP 220 5%	1/10W
R930	1-216-029-00	METAL CHIP 150 5%	1/10W
R931	1-216-033-00	METAL CHIP 220 5%	1/10W
R932	1-216-029-00	METAL CHIP 150 5%	1/10W
R933	1-216-033-00	METAL CHIP 220 5%	1/10W
R934	1-216-029-00	METAL CHIP 150 5%	1/10W
R935	1-216-033-00	METAL CHIP 220 5%	1/10W
R936	1-216-029-00	METAL CHIP 150 5%	1/10W
R937	1-216-033-00	METAL CHIP 220 5%	1/10W
R938	1-216-029-00	METAL CHIP 150 5%	1/10W
R939	1-216-033-00	METAL CHIP 220 5%	1/10W
R940	1-216-029-00	METAL CHIP 150 5%	1/10W
R942	1-216-027-00	METAL CHIP 120 5%	1/10W

Ref. No.	Part No.	Description	Remark
R943	1-216-027-00	METAL CHIP 120 5%	1/10W
R944	1-216-817-11	METAL CHIP 470 5%	1/10W
R945	1-216-817-11	METAL CHIP 470 5%	1/10W
R946	1-216-817-11	METAL CHIP 470 5%	1/10W
R951	1-216-820-11	METAL CHIP 820 5%	1/10W
R952	1-216-821-11	METAL CHIP 1K 5%	1/10W
R953	1-216-821-11	METAL CHIP 1K 5%	1/10W
R954	1-216-822-11	METAL CHIP 1.2K 5%	1/10W
R955	1-216-823-11	METAL CHIP 1.5K 5%	1/10W
R956	1-216-824-11	METAL CHIP 1.8K 5%	1/10W
R957	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
R958	1-216-827-11	METAL CHIP 3.3K 5%	1/10W
R959	1-216-820-11	METAL CHIP 820 5%	1/10W
R960	1-216-821-11	METAL CHIP 1K 5%	1/10W
R961	1-216-821-11	METAL CHIP 1K 5%	1/10W
R962	1-216-822-11	METAL CHIP 1.2K 5%	1/10W
R963	1-216-823-11	METAL CHIP 1.5K 5%	1/10W
R964	1-216-824-11	METAL CHIP 1.8K 5%	1/10W
R965	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
R966	1-216-827-11	METAL CHIP 3.3K 5%	1/10W
R969	1-216-295-11	SHORT CHIP 0	
R970	1-216-295-11	SHORT CHIP 0	
R973	1-216-817-11	METAL CHIP 470 5%	1/10W
R974	1-216-817-11	METAL CHIP 470 5%	1/10W
R975	1-216-817-11	METAL CHIP 470 5%	1/10W
R978	1-216-809-11	METAL CHIP 100 5%	1/10W
R979	1-216-295-11	SHORT CHIP 0	
R980	1-216-864-11	SHORT CHIP 0	
R981	1-216-811-11	METAL CHIP 150 5%	1/10W
R982	1-216-859-11	METAL CHIP 1.5M 5%	1/10W
R983	1-216-025-11	METAL CHIP 100 5%	1/10W
R984	1-216-025-11	METAL CHIP 100 5%	1/10W
R985	1-216-025-11	METAL CHIP 100 5%	1/10W
R986	1-216-033-00	METAL CHIP 220 5%	1/10W
R987	1-216-821-11	METAL CHIP 1K 5%	1/10W
R988	1-216-809-11	METAL CHIP 100 5%	1/10W
R991	1-216-029-00	METAL CHIP 150 5%	1/10W
R992	1-216-025-11	METAL CHIP 100 5%	1/10W
R993	1-216-295-11	SHORT CHIP 0	
R994	1-216-055-00	METAL CHIP 1.8K 5%	1/10W
R995	1-216-845-11	METAL CHIP 100K 5%	1/10W
R996	1-216-833-11	METAL CHIP 10K 5%	1/10W
R997	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R998	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
		< ROTARY ENCODER >	
RE901	1-487-023-11	ENCODER, ROTARY (PUSH ENTER/SELECT (VOLUME))	
		< SWITCH >	
S951	1-786-653-21	SWITCH, TACTILE (OFF)	
S952	1-786-653-21	SWITCH, TACTILE (SOURCE)	
S953	1-786-653-21	SWITCH, TACTILE (SEEK+/ ▶▶ ▶▶I)	
S954	1-786-653-21	SWITCH, TACTILE (ZAP)	
S955	1-786-653-21	SWITCH, TACTILE (⮌ (BACK))	
S956	1-786-653-21	SWITCH, TACTILE (🔍 (BROWSE))	
S957	1-786-653-21	SWITCH, TACTILE (MODE)	
S958	1-786-653-21	SWITCH, TACTILE (I◀◀ ◀◀ /SEEK–)	
S959	1-786-653-21	SWITCH, TACTILE (DSPL/SCRL)	
S960	1-786-653-21	SWITCH, TACTILE (6/PAUSE)	

KEY **MAIN**

Ref. No.	Part No.	Description			Remark
S961	1-786-653-21	SWITCH, TACTILE (5/DM+)			
S962	1-786-653-21	SWITCH, TACTILE (4/SHUF)			
S963	1-786-653-21	SWITCH, TACTILE (3/REP)			
S964	1-786-653-21	SWITCH, TACTILE (2/ALBUM +)			
S965	1-786-653-21	SWITCH, TACTILE (1/ALBUM –)			
S966	1-786-653-21	SWITCH, TACTILE (BTM/CAT) (M60UI)			
S966	1-786-653-21	SWITCH, TACTILE (AF/TA/PTY) (MR60UI)			
**********					
	A-1609-298-A	MAIN BOARD, COMPLETE (M60UI)			
	A-1609-320-A	MAIN BOARD, COMPLETE (MR60UI)			
		**********			
	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT			
	7-685-794-09	SCREW +PTT 2.6X10 (S)			
		< CAPACITOR >			
C1	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C5	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C6	1-162-914-11	CERAMIC CHIP	9PF	0.5PF	50V (M60UI)
C6	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V (MR60UI)
C7	1-162-911-11	CERAMIC CHIP	6PF	0.5PF	50V
C8	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C9	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C12	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C13	1-100-742-11	CERAMIC CHIP	2.2uF	20%	10V
C16	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C17	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C18	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C19	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C20	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C21	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C22	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C23	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C24	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C25	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C26	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C27	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C28	1-126-947-11	ELECT	47uF	20%	35V
C29	1-162-959-11	CERAMIC CHIP	330PF	5%	50V (MR60UI)
C98	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C99	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C102	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (MR60UI)
C103	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (MR60UI)
C104	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (MR60UI)
C105	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (MR60UI)
C106	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (MR60UI)
C108	1-126-947-11	ELECT	47uF	20%	35V (MR60UI)
C109	1-164-237-11	CERAMIC CHIP	16PF	5%	50V (MR60UI)
C110	1-164-237-11	CERAMIC CHIP	16PF	5%	50V (MR60UI)
C111	1-162-923-11	CERAMIC CHIP	47PF	5%	50V (MR60UI)
C112	1-162-923-11	CERAMIC CHIP	47PF	5%	50V (MR60UI)
C201	1-124-233-11	ELECT	10uF	20%	16V
C202	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C203	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C204	1-124-234-00	ELECT	22uF	20%	16V
C205	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C206	1-164-739-11	CERAMIC CHIP	560PF	5%	50V
C207	1-164-739-11	CERAMIC CHIP	560PF	5%	50V
C208	1-124-584-00	ELECT	100uF	20%	10V
C209	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C301	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C302	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C303	1-128-551-11	ELECT	22uF	20%	63V
C304	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C305	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C306	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C307	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C308	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C309	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C310	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C311	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C312	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C313	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C314	1-100-352-11	CERAMIC CHIP	1uF	20%	16V
C316	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C317	1-124-233-11	ELECT	10uF	20%	16V
C318	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C319	1-124-233-11	ELECT	10uF	20%	16V
C320	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C321	1-124-233-11	ELECT	10uF	20%	16V
C322	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C323	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C324	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C325	1-126-926-11	ELECT	1000uF	20%	10V
C328	1-128-057-11	ELECT	330uF	20%	6.3V
C329	1-107-725-11	CERAMIC CHIP	0.1uF	10%	16V
C330	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C332	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C333	1-125-889-11	CERAMIC CHIP	2.2uF	10%	10V
C334	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C401	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C402	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C405	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C406	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C407	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C408	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C409	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C410	1-137-712-11	CERAMIC CHIP	0.0047uF	20%	250V
C411	1-136-159-00	FILM	0.033uF	5%	50V
C412	1-136-159-00	FILM	0.033uF	5%	50V
C413	1-137-712-11	CERAMIC CHIP	0.0047uF	20%	250V
C414	1-126-964-11	ELECT	10uF	20%	50V
C415	1-126-934-11	ELECT	220uF	20%	16V
C416	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C417	1-124-257-00	ELECT	2.2uF	20%	50V
C418	1-124-257-00	ELECT	2.2uF	20%	50V
C503	1-162-920-11	CERAMIC CHIP	27PF	5%	50V
C504	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C505	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C506	1-100-352-11	CERAMIC CHIP	1uF	20%	16V

Ref. No.	Part No.	Description			Remark
C507	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C508	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C509	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C510	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C511	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C512	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C513	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C514	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C517	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C601	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C602	1-126-941-11	ELECT	470uF	20%	25V
C603	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C701	1-112-302-11	ELECT	3300uF	20%	16V
C702	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C703	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C704	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C705	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C706	1-126-163-11	ELECT	4.7uF	20%	50V
C707	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C708	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C801	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C802	1-165-727-31	ELECT	120uF	20%	16V
C803	1-100-352-11	CERAMIC CHIP	1uF	20%	16V
C804	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C805	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C806	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C807	1-100-352-11	CERAMIC CHIP	1uF	20%	16V
C808	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C809	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C810	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C811	1-218-893-11	METAL CHIP	82K	0.5%	1/10W
C813	1-126-924-11	ELECT	330uF	20%	10V
C814	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C815	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C817	1-104-665-11	ELECT	100uF	20%	25V
C819	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C820	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C822	1-104-665-11	ELECT	100uF	20%	25V
C823	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C824	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C901	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C902	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C903	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C904	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C905	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C906	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C907	1-126-964-11	ELECT	10uF	20%	50V
C908	1-126-964-11	ELECT	10uF	20%	50V
C909	1-126-964-11	ELECT	10uF	20%	50V
C910	1-126-964-11	ELECT	10uF	20%	50V
C911	1-126-964-11	ELECT	10uF	20%	50V
C912	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C913	1-124-589-11	ELECT	47uF	20%	16V
C915	1-126-933-11	ELECT	100uF	20%	16V
C917	1-137-712-11	CERAMIC CHIP	0.0047uF	20%	250V
C918	1-137-712-11	CERAMIC CHIP	0.0047uF	20%	250V
C919	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C921	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C922	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C923	1-126-961-11	ELECT	2.2uF	20%	50V

Ref. No.	Part No.	Description			Remark
C924	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C925	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
		< CONNECTOR >			
CN201	1-820-611-11	CONNECTOR, BOARD TO BOARD 28P			
CN202	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P			
CN203	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P			
* CN501	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P			
CN701	1-774-701-21	PIN, CONNECTOR 16P			
* CN901	1-564-506-11	PLUG, CONNECTOR 3P			
CN902	1-770-528-31	CONNECTOR, FFC/FPC 21P			
		< DIODE >			
D201	6-501-013-01	DIODE BAT54ALT1G			
D202	6-501-193-01	DIODE 1SS355WTE-17			
D203	6-501-743-01	DIODE MAZ8068GMLS0			
D204	6-501-743-01	DIODE MAZ8068GMLS0			
D205	6-501-743-01	DIODE MAZ8068GMLS0			
D305	6-500-522-01	DIODE 10EDB40-TA1B2			
D306	6-500-522-01	DIODE 10EDB40-TA1B2			
D307	6-500-522-01	DIODE 10EDB40-TA1B2			
D308	6-500-522-01	DIODE 10EDB40-TA1B2			
D309	6-500-522-01	DIODE 10EDB40-TA1B2			
D310	6-500-522-01	DIODE 10EDB40-TA1B2			
D311	6-500-522-01	DIODE 10EDB40-TA1B2			
D312	6-500-522-01	DIODE 10EDB40-TA1B2			
D501	6-501-743-01	DIODE MAZ8068GMLS0			
D502	6-501-193-01	DIODE 1SS355WTE-17			
D503	6-501-743-01	DIODE MAZ8068GMLS0			
D504	6-500-334-01	DIODE MC2836-T112-1			
D505	6-501-193-01	DIODE 1SS355WTE-17			
D601	6-501-782-01	DIODE MAZ8180GMLS0			
D603	6-501-782-01	DIODE MAZ8180GMLS0			
D604	6-502-273-01	DIODE MA2ZD140GLS0			
D605	6-501-782-01	DIODE MAZ8180GMLS0			
D606	6-501-738-01	DIODE MAZ8062GMLS0			
D607	6-501-782-01	DIODE MAZ8180GMLS0			
D701	6-501-571-01	DIODE 1N5404-C311-3			
D702	6-501-782-01	DIODE MAZ8180GMLS0			
D703	6-501-782-01	DIODE MAZ8180GMLS0			
D704	6-501-782-01	DIODE MAZ8180GMLS0			
D705	6-501-782-01	DIODE MAZ8180GMLS0			
D706	6-501-782-01	DIODE MAZ8180GMLS0			
D707	6-501-193-01	DIODE 1SS355WTE-17			
D708	6-501-743-01	DIODE MAZ8068GMLS0			
D709	6-500-522-01	DIODE 10EDB40-TA1B2			
D801	6-501-768-01	DIODE MAZ8120GMLS0			
D802	6-501-657-01	DIODE MA24D5000BS0			
D803	6-501-734-01	DIODE MAZ8056GMLS0			
D804	6-501-193-01	DIODE 1SS355WTE-17			
D901	6-501-193-01	DIODE 1SS355WTE-17			
D903	6-501-743-01	DIODE MAZ8068GMLS0			
D904	6-501-743-01	DIODE MAZ8068GMLS0			
D905	6-501-743-01	DIODE MAZ8068GMLS0			
D908	6-501-743-01	DIODE MAZ8068GMLS0			
D909	6-501-743-01	DIODE MAZ8068GMLS0			
D910	6-501-743-01	DIODE MAZ8068GMLS0			
D911	1-805-043-11	ABSORBER, CHIP SURGE			
D912	6-501-743-01	DIODE MAZ8068GMLS0			
D913	1-805-043-11	ABSORBER, CHIP SURGE			

Ref. No.	Part No.	Description	Remark
D914	1-805-043-11	ABSORBER, CHIP SURGE	
D915	8-719-978-33	DIODE DTZ-TT11-6.8B	
		< FUSE >	
F801	1-576-416-21	FUSE, MICRO (1608 TYPE) 2A	
		< FERRITE BEAD >	
FB1	1-400-334-21	FERRITE, EMI (SMD) (1608) (M60UI)	
FB2	1-400-334-21	FERRITE, EMI (SMD) (1608) (M60UI)	
FB3	1-400-334-21	FERRITE, EMI (SMD) (1608) (M60UI)	
		< IC >	
IC001	6-712-929-02	IC TEF6607T/V4/S470,518 (M60UI)	
IC001	6-712-929-12	IC TEF6607T/V4/S470/M5,518 (MR60UI)	
IC101	6-803-747-01	IC TDA7333013TR (MR60UI)	
IC301	6-705-359-02	IC TDA8588AJ/N2/R1 (M60UI)	
IC301	6-705-359-11	IC TDA8588AJ/N2/R1/M5 (MR60UI)	
IC302	6-711-670-01	IC XC6218P332PR	
IC303	6-709-458-01	IC XC61CN2802NR	
IC401	6-713-080-11	IC BD3447AFV-E2	
IC501	6-808-631-01	IC MB90F883AHPF-GE1-346A (for SERVICE)	
IC502	6-703-740-01	IC S-24CS02AFT-TB-G	
IC601	6-703-884-01	IC BA8271F-E2	
IC801	6-710-965-01	IC TPS40200DRG4	
IC802	6-710-624-01	IC TPS2051BDRG4	
IC803	8-759-586-19	IC TC7WH123FU(TE12R)	
		< JACK >	
J1	1-815-185-13	JACK (ANTENNA)	
J601	1-580-907-41	PLUG, CONNECTOR 11P (BUS CONTROL IN)	
J701	1-566-822-41	JACK (REMOTE IN)	
J901	1-774-700-41	JACK, PIN 6P (BUS AUDIO IN, REAR AUDIO OUT,FRONT AUDIO OUT)	
		< JUMPER RESISTOR >	
JR1	1-216-295-11	SHORT CHIP 0	
JR2	1-216-295-11	SHORT CHIP 0	
JR3	1-216-295-11	SHORT CHIP 0	
JR4	1-216-295-11	SHORT CHIP 0	
JR5	1-216-295-11	SHORT CHIP 0	
JR6	1-216-295-11	SHORT CHIP 0	
JR7	1-216-296-11	SHORT CHIP 0	
JR8	1-216-296-11	SHORT CHIP 0	
JR9	1-216-295-11	SHORT CHIP 0	
JR10	1-216-296-11	SHORT CHIP 0	
JR11	1-216-295-11	SHORT CHIP 0	
JR12	1-216-296-11	SHORT CHIP 0	
JR13	1-216-296-11	SHORT CHIP 0	
JR14	1-216-296-11	SHORT CHIP 0	
JR15	1-216-295-11	SHORT CHIP 0	
JR16	1-216-864-11	SHORT CHIP 0	
JR17	1-216-295-11	SHORT CHIP 0	
JR18	1-216-296-11	SHORT CHIP 0	
JR20	1-216-295-11	SHORT CHIP 0	
JR21	1-216-296-11	SHORT CHIP 0	
JR23	1-216-295-11	SHORT CHIP 0	
JR24	1-216-295-11	SHORT CHIP 0	
JR25	1-216-295-11	SHORT CHIP 0	
JR26	1-216-295-11	SHORT CHIP 0	
JR27	1-216-296-11	SHORT CHIP 0	
JR28	1-216-296-11	SHORT CHIP 0	
JR29	1-216-296-11	SHORT CHIP 0	
JR30	1-216-295-11	SHORT CHIP 0	
JR31	1-216-295-11	SHORT CHIP 0	
JR32	1-216-295-11	SHORT CHIP 0	
JR33	1-216-864-11	SHORT CHIP 0	
JR34	1-216-864-11	SHORT CHIP 0	
JR35	1-216-295-11	SHORT CHIP 0	
JR36	1-216-296-11	SHORT CHIP 0	
JR37	1-216-864-11	SHORT CHIP 0	
JR38	1-216-864-11	SHORT CHIP 0	
JR39	1-216-864-11	SHORT CHIP 0	
JR40	1-216-295-11	SHORT CHIP 0	
JR41	1-216-864-11	SHORT CHIP 0	
JR42	1-216-295-11	SHORT CHIP 0	
JR43	1-216-295-11	SHORT CHIP 0	
JR44	1-216-296-11	SHORT CHIP 0	
JR45	1-216-864-11	SHORT CHIP 0	
JR46	1-216-864-11	SHORT CHIP 0	
JR47	1-216-295-11	SHORT CHIP 0	
JR48	1-216-296-11	SHORT CHIP 0	
JR49	1-216-296-11	SHORT CHIP 0	
JR50	1-216-296-11	SHORT CHIP 0	
JR51	1-216-296-11	SHORT CHIP 0	
		< COIL >	
L1	1-414-180-51	INDUCTOR 3.3uH	
L2	1-410-501-61	INDUCTOR 2.2uH	
L6	1-457-644-11	COIL (FM MIX)	
L7	1-481-285-51	INDUCTOR 560uH	
L8	1-481-285-51	INDUCTOR 560uH	
L101	1-500-329-21	INDUCTOR, FERRITE BEAD (MR60UI)	
L102	1-500-329-21	INDUCTOR, FERRITE BEAD (MR60UI)	
L103	1-500-329-21	INDUCTOR, FERRITE BEAD (MR60UI)	
L104	1-500-329-21	INDUCTOR, FERRITE BEAD (MR60UI)	
L201	1-500-245-11	INDUCTOR, FERRITE BEAD	
L202	1-469-876-11	INDUCTOR, FERRITE BEAD	
L203	1-414-760-21	INDUCTOR, FERRITE BEAD	
L204	1-500-245-11	INDUCTOR, FERRITE BEAD	
L206	1-419-521-21	COIL, COMMOM MODE CHOKE	
L401	1-414-595-11	INDUCTOR, FERRITE BEAD	
L402	1-414-595-11	INDUCTOR, FERRITE BEAD	
L501	1-414-595-11	INDUCTOR, FERRITE BEAD	
L701	1-456-617-11	COIL, CHOKE	
L702	1-414-595-11	INDUCTOR, FERRITE BEAD	
L703	1-414-595-11	INDUCTOR, FERRITE BEAD	
L704	1-414-595-11	INDUCTOR, FERRITE BEAD	
L801	1-411-499-11	COIL, CHOKE 47uH	
L802	1-419-624-11	COIL, CHOKE 68uH	
L803	1-412-525-31	INDUCTOR 10uH	
L901	1-500-245-11	INDUCTOR, FERRITE BEAD	
		< TRANSISTOR >	
Q101	6-551-696-01	TRANSISTOR ISA1235AC1TP-1EF (MR60UI)	
Q102	8-729-027-43	TRANSISTOR DTC114EKA-T146 (MR60UI)	
Q201	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q501	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q502	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q503	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q601	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q701	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	

Ref. No.	Part No.	Description			Remark
Q702	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF			
Q703	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF			
Q801	6-551-923-01	FET TPC6108(T5RSONYF,M			
Q802	8-729-027-43	TRANSISTOR DTC114EKA-T146			
Q803	6-550-828-01	FET RSQ035P03TR			
Q804	8-729-027-23	TRANSISTOR DTA114EKA-T146			
Q805	8-729-027-43	TRANSISTOR DTC114EKA-T146			
Q806	6-551-923-01	FET TPC6108(T5RSONYF,M			
Q901	6-551-856-01	TRANSISTOR LTC614TKFP8T146			
Q902	6-551-856-01	TRANSISTOR LTC614TKFP8T146			
Q903	6-551-856-01	TRANSISTOR LTC614TKFP8T146			
Q904	6-551-856-01	TRANSISTOR LTC614TKFP8T146			
Q905	6-551-856-01	TRANSISTOR LTC614TKFP8T146			
Q906	8-729-027-23	TRANSISTOR DTA114EKA-T146			
Q907	8-729-027-43	TRANSISTOR DTC114EKA-T146			
Q908	8-729-047-76	TRANSISTOR FMC2A-T148			
		< RESISTOR >			
R1	1-216-853-11	METAL CHIP	470K	5%	1/10W
R2	1-216-853-11	METAL CHIP	470K	5%	1/10W
R3	1-216-864-11	SHORT CHIP	0 (MR60UI)		
R4	1-216-864-11	SHORT CHIP	0		
R5	1-216-864-11	SHORT CHIP	0		
R6	1-216-843-11	METAL CHIP	68K	5%	1/10W
R10	1-216-839-11	METAL CHIP	33K	5%	1/10W
R11	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R12	1-216-009-11	METAL CHIP	22	5%	1/10W
R13	1-216-809-11	METAL CHIP	100	5%	1/10W
R14	1-216-809-11	METAL CHIP	100	5%	1/10W
R15	1-216-864-11	SHORT CHIP	0 (MR60UI)		
R16	1-216-864-11	SHORT CHIP	0 (MR60UI)		
R102	1-216-797-11	METAL CHIP	10	5%	1/10W (MR60UI)
R103	1-216-845-11	METAL CHIP	100K	5%	1/10W (MR60UI)
R104	1-216-864-11	SHORT CHIP	0 (MR60UI)		
R105	1-216-833-11	METAL CHIP	10K	5%	1/10W (MR60UI)
R106	1-216-821-11	METAL CHIP	1K	5%	1/10W (MR60UI)
R107	1-216-864-11	SHORT CHIP	0 (MR60UI)		
R108	1-216-864-11	SHORT CHIP	0 (MR60UI)		
R109	1-216-864-11	SHORT CHIP	0		
R110	1-216-864-11	SHORT CHIP	0		
R111	1-216-864-11	SHORT CHIP	0		
R112	1-216-833-11	METAL CHIP	10K	5%	1/10W (MR60UI)
R201	1-216-845-11	METAL CHIP	100K	5%	1/10W
R202	1-216-864-11	SHORT CHIP	0		
R203	1-216-296-11	SHORT CHIP	0		
R204	1-216-864-11	SHORT CHIP	0		
R205	1-216-809-11	METAL CHIP	100	5%	1/10W
R207	1-216-809-11	METAL CHIP	100	5%	1/10W
R208	1-216-809-11	METAL CHIP	100	5%	1/10W
R209	1-216-295-11	SHORT CHIP	0		
R211	1-216-864-11	SHORT CHIP	0		
R212	1-216-864-11	SHORT CHIP	0		
R213	1-216-821-11	METAL CHIP	1K	5%	1/10W
R214	1-216-821-11	METAL CHIP	1K	5%	1/10W
R215	1-216-864-11	SHORT CHIP	0		
R216	1-216-295-11	SHORT CHIP	0		
R217	1-216-296-11	SHORT CHIP	0		
R218	1-216-864-11	SHORT CHIP	0		
R220	1-216-801-11	METAL CHIP	22	5%	1/10W
R221	1-216-801-11	METAL CHIP	22	5%	1/10W
R301	1-216-296-11	SHORT CHIP	0		
R302	1-216-296-11	SHORT CHIP	0		
R303	1-216-811-11	METAL CHIP	150	5%	1/10W
R304	1-216-864-11	SHORT CHIP	0		
R305	1-216-841-11	METAL CHIP	47K	5%	1/10W
R306	1-216-295-11	SHORT CHIP	0		
R307	1-216-845-11	METAL CHIP	100K	5%	1/10W
R403	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R404	1-216-841-11	METAL CHIP	47K	5%	1/10W
R406	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R407	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R408	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R409	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R502	1-216-845-11	METAL CHIP	100K	5%	1/10W
R504	1-216-845-11	METAL CHIP	100K	5%	1/10W
R505	1-216-845-11	METAL CHIP	100K	5%	1/10W
R508	1-216-845-11	METAL CHIP	100K	5%	1/10W
R509	1-216-821-11	METAL CHIP	1K	5%	1/10W
R510	1-216-845-11	METAL CHIP	100K	5%	1/10W
R511	1-216-845-11	METAL CHIP	100K	5%	1/10W
R512	1-216-809-11	METAL CHIP	100	5%	1/10W
R513	1-216-821-11	METAL CHIP	1K	5%	1/10W
R514	1-216-833-11	METAL CHIP	10K	5%	1/10W
R515	1-216-821-11	METAL CHIP	1K	5%	1/10W
R516	1-216-833-11	METAL CHIP	10K	5%	1/10W
R517	1-216-845-11	METAL CHIP	100K	5%	1/10W
R518	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R519	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R520	1-216-845-11	METAL CHIP	100K	5%	1/10W
R521	1-216-845-11	METAL CHIP	100K	5%	1/10W
R522	1-216-845-11	METAL CHIP	100K	5%	1/10W
R523	1-216-296-11	SHORT CHIP	0		
R524	1-216-864-11	SHORT CHIP	0		
R525	1-216-809-11	METAL CHIP	100	5%	1/10W
R526	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R527	1-216-809-11	METAL CHIP	100	5%	1/10W
R528	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R529	1-216-809-11	METAL CHIP	100	5%	1/10W
R530	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R531	1-216-821-11	METAL CHIP	1K	5%	1/10W
R532	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R533	1-216-817-11	METAL CHIP	470	5%	1/10W
R534	1-216-817-11	METAL CHIP	470	5%	1/10W
R535	1-216-817-11	METAL CHIP	470	5%	1/10W
R536	1-216-845-11	METAL CHIP	100K	5%	1/10W
R537	1-216-809-11	METAL CHIP	100	5%	1/10W
R538	1-216-845-11	METAL CHIP	100K	5%	1/10W
R539	1-216-845-11	METAL CHIP	100K	5%	1/10W
R540	1-216-809-11	METAL CHIP	100	5%	1/10W
R541	1-216-809-11	METAL CHIP	100	5%	1/10W
R543	1-216-845-11	METAL CHIP	100K	5%	1/10W (MR60UI)
R545	1-216-845-11	METAL CHIP	100K	5%	1/10W
R546	1-216-845-11	METAL CHIP	100K	5%	1/10W (MR60UI)
R547	1-216-845-11	METAL CHIP	100K	5%	1/10W (M60UI)

MAIN **SERVO** **SUB**

Ref. No.	Part No.	Description			Remark
R548	1-216-845-11	METAL CHIP	100K	5%	1/10W (M60UI)
R549	1-216-845-11	METAL CHIP	100K	5%	1/10W (M60UI)
R550	1-216-809-11	METAL CHIP	100	5%	1/10W
R551	1-216-845-11	METAL CHIP	100K	5%	1/10W
R552	1-216-845-11	METAL CHIP	100K	5%	1/10W
R553	1-216-845-11	METAL CHIP	100K	5%	1/10W
R554	1-216-845-11	METAL CHIP	100K	5%	1/10W
R555	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R556	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R557	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R558	1-216-809-11	METAL CHIP	100	5%	1/10W
R559	1-216-845-11	METAL CHIP	100K	5%	1/10W
R560	1-216-864-11	SHORT CHIP	0		
R561	1-216-864-11	SHORT CHIP	0		
R562	1-216-864-11	SHORT CHIP	0		
R563	1-216-849-11	METAL CHIP	220K	5%	1/10W
R564	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R565	1-216-809-11	METAL CHIP	100	5%	1/10W
R566	1-216-845-11	METAL CHIP	100K	5%	1/10W
R567	1-216-845-11	METAL CHIP	100K	5%	1/10W
R568	1-216-821-11	METAL CHIP	1K	5%	1/10W
R601	1-216-809-11	METAL CHIP	100	5%	1/10W
R602	1-216-809-11	METAL CHIP	100	5%	1/10W
R603	1-216-821-11	METAL CHIP	1K	5%	1/10W
R604	1-216-821-11	METAL CHIP	1K	5%	1/10W
R605	1-216-296-11	SHORT CHIP	0		
R606	1-216-809-11	METAL CHIP	100	5%	1/10W
R607	1-216-835-11	METAL CHIP	15K	5%	1/10W
R608	1-216-821-11	METAL CHIP	1K	5%	1/10W
R609	1-216-851-11	METAL CHIP	330K	5%	1/10W
R610	1-216-851-11	METAL CHIP	330K	5%	1/10W
R701	1-249-425-11	CARBON	4.7K	5%	1/4W
R702	1-216-821-11	METAL CHIP	1K	5%	1/10W
R703	1-249-425-11	CARBON	4.7K	5%	1/4W
R704	1-216-841-11	METAL CHIP	47K	5%	1/10W
R705	1-216-833-11	METAL CHIP	10K	5%	1/10W
R706	1-216-833-11	METAL CHIP	10K	5%	1/10W
R707	1-216-845-11	METAL CHIP	100K	5%	1/10W
R708	1-216-837-11	METAL CHIP	22K	5%	1/10W
R709	1-216-841-11	METAL CHIP	47K	5%	1/10W
R710	1-216-841-11	METAL CHIP	47K	5%	1/10W
R711	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R801	1-216-842-11	METAL CHIP	56K	5%	1/10W
R802	1-216-842-11	METAL CHIP	56K	5%	1/10W
R803	1-246-335-11	METAL CHIP	0.012	1%	1/2W
R804	1-246-335-11	METAL CHIP	0.012	1%	1/2W
R805	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R806	1-216-843-11	METAL CHIP	68K	5%	1/10W
R808	1-216-845-11	METAL CHIP	100K	5%	1/10W
R809	1-216-864-11	SHORT CHIP	0		
R810	1-216-851-11	METAL CHIP	330K	5%	1/10W
R811	1-218-893-11	METAL CHIP	82K	0.5%	1/10W
R812	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R813	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
R814	1-216-842-11	METAL CHIP	56K	5%	1/10W
R815	1-216-833-11	METAL CHIP	10K	5%	1/10W
R816	1-216-821-11	METAL CHIP	1K	5%	1/10W
R818	1-216-833-11	METAL CHIP	10K	5%	1/10W
R819	1-216-833-11	METAL CHIP	10K	5%	1/10W
R820	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R821	1-216-821-11	METAL CHIP	1K	5%	1/10W
R822	1-216-864-11	SHORT CHIP	0		
R825	1-216-821-11	METAL CHIP	1K	5%	1/10W
R826	1-216-821-11	METAL CHIP	1K	5%	1/10W
R827	1-216-821-11	METAL CHIP	1K	5%	1/10W
R903	1-216-821-11	METAL CHIP	1K	5%	1/10W
R904	1-216-821-11	METAL CHIP	1K	5%	1/10W
R905	1-216-833-11	METAL CHIP	10K	5%	1/10W
R906	1-216-833-11	METAL CHIP	10K	5%	1/10W
R907	1-216-813-11	METAL CHIP	220	5%	1/10W
R908	1-216-813-11	METAL CHIP	220	5%	1/10W
R909	1-216-813-11	METAL CHIP	220	5%	1/10W
R910	1-216-033-00	METAL CHIP	220	5%	1/10W
R911	1-216-813-11	METAL CHIP	220	5%	1/10W
R913	1-216-017-11	METAL CHIP	47	5%	1/10W
R914	1-216-817-11	METAL CHIP	470	5%	1/10W
R915	1-216-817-11	METAL CHIP	470	5%	1/10W
R916	1-216-834-11	METAL CHIP	12K	5%	1/10W
R917	1-216-834-11	METAL CHIP	12K	5%	1/10W
R918	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R919	1-216-833-11	METAL CHIP	10K	5%	1/10W
R920	1-216-833-11	METAL CHIP	10K	5%	1/10W
R921	1-216-833-11	METAL CHIP	10K	5%	1/10W
R922	1-216-833-11	METAL CHIP	10K	5%	1/10W
R923	1-216-833-11	METAL CHIP	10K	5%	1/10W
R924	1-216-027-00	METAL CHIP	120	5%	1/10W
R925	1-216-027-00	METAL CHIP	120	5%	1/10W
R926	1-216-027-00	METAL CHIP	120	5%	1/10W

< SWITCH >

S501	1-786-458-11	SWITCH, PUSH (1 KEY) (FRONT PANEL DETACH DETECT)
S502	1-571-478-11	SWITCH, SLIDE (FREQUENCY SELECT) (M60UI)
S503	1-786-826-11	SWITCH, TACTILE (RESET)

< THERMISTOR (POSITIVE) >

TH601	1-803-350-21	THERMISTOR, POSITIVE

< SURGE ABSORBER >

VR1	1-805-043-11	ABSORBER, CHIP SURGE

< VIBRATOR >

X1	1-814-161-11	QUARTZ CRYSTAL UNIT (4MHz)
X101	1-813-173-11	VIBRATOR, CRYSTAL (8.664MHz) (MR60UI)
X501	1-814-207-21	VIBRATOR, CERAMIC (7.92MHz)
X502	1-813-202-11	VIBRATOR, CRYSTAL (32.768kHz)

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	A-1554-409-A	SERVO BOARD, COMPLETE
		**********

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SUB BOARD
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	1-835-781-11	CABLE, FLEXIBLE FLAT (21 CORE) (CN202)

< CAPACITOR >

C201	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C202	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C203	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V

Ref. No.	Part No.	Description			Remark
		< CONNECTOR >			
CN201	1-818-142-11	SOCKET, CONNECTOR 20P			
		< DIODE >			
D203	6-501-743-01	DIODE MAZ8068GMLS0			
D204	6-501-743-01	DIODE MAZ8068GMLS0			
LED201	6-502-542-01	LED SCM015BC7TT86P (⏏)			
LED202	6-502-542-01	LED SCM015BC7TT86P (DOOR INDICATOR)			
		< RESISTOR >			
R203	1-216-864-11	SHORT CHIP	0		
R205	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R206	1-216-049-11	METAL CHIP	1K	5%	1/10W
		< SWITCH >			
S201	1-786-653-21	SWITCH, TACTILE (⏏)			
**********					
		MISCELLANEOUS **********			
3	1-835-781-11	CABLE, FLEXIBLE FLAT (21 CORE)			
11	1-776-527-71	CORD (WITH CONNECTOR) (ISO) (POWER)			(MR60UI)
11	1-833-972-11	CONNECTION CORD FOR AUTOMOBILE			(POWER) (M60UI)
12	1-833-887-11	CONNECTION CORD (RCA) (SUB OUT (MONO))			
14	1-836-199-11	CONNECTION CORD FOR AUTOMOBILE (USB)			
⚠ 103	X-2149-672-1	SERVICE ASSY, OP (DAX-25A)			
FU601	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A			
**********					
		ACCESSORIES **********			
	1-479-077-13	REMOTE COMMANDER (RM-X151)			
	2-548-729-01	LID, BATTERY CASE (for RM-X151)			
	2-683-516-01	CAP (AUX) (for AUX jack)			
	4-127-000-11	MANUAL, INSTRUCTION (ENGLISH,FRENCH, SPANISH,GERMAN,DUTCH,ITALIAN) (MR60UI)			
	4-127-000-21	MANUAL, INSTRUCTION (ENGLISH,FRENCH, SPANISH,GERMAN,DUTCH) (M60UI)			
	4-127-001-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH,SPANISH,GERMAN,DUTCH,ITALIAN)			(MR60UI)
	4-127-001-21	MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH,SPANISH,GERMAN,DUTCH) (M60UI)			
	X-2187-544-1	CASE ASSY (for FRONT PANEL)			
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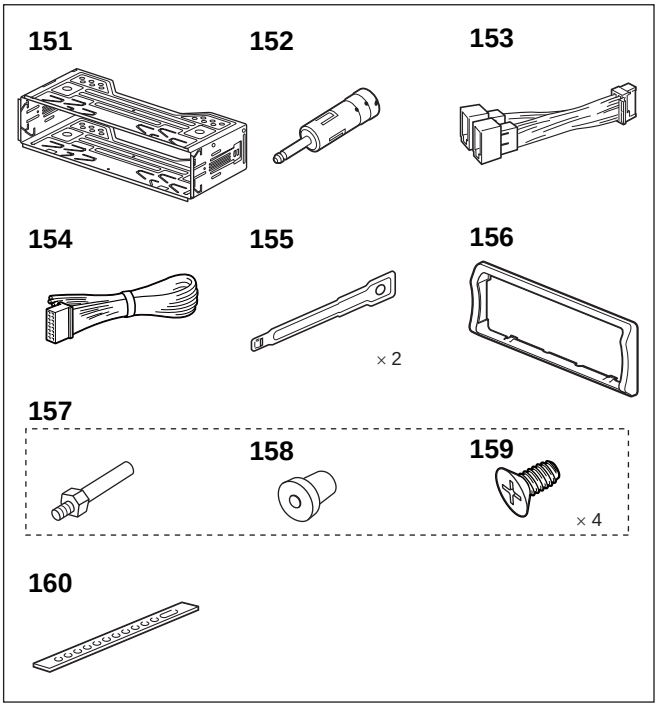
Ref. No.	Part No.	Description	Remark
		PARTS FOR INSTALLATION AND CONNECTIONS **********	
151	X-2179-455-2	FRAME ASSY, FITTING	
152	1-465-459-31	ADAPTOR, ANTENNA (MR60UI)	
153	1-776-527-71	CORD (WITH CONNECTOR) (ISO) (POWER)	(MR60UI)
154	1-833-972-11	CONNECTION CORD FOR AUTOMOBILE	(POWER) (M60UI)
155	3-876-675-01	KEY (FRAME)	
156	3-874-329-11	COLLAR	
157	X-3381-154-1	SCREW ASSY (BS4), FITTING	
158	3-349-410-11	BUSHING	
159	3-934-325-01	SCREW, +K (5X8) TAPPING	
160	(not supplied)	PLATE (FITTING)	



REVISION HISTORY

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Ver.	Date	Description of Revision
1.0	2008.11	New
1.1	2009.02	IC501 of MAIN board is changed to the repair parts. (SMR-08213)